Nos. 80-231
and 80-[illegible]

Supreme Court, U.S.
FILED
AUG 20 1981

Supreme Court of the United States

OCTOBER TERM, 1980

No. 1997
STATE OF WISCONSIN AND PUBLIC SERVICE COMMISSION OF WISCONSIN, Petitioners
v.
FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors

No. 1998
CITY OF DETROIT, MICHIGAN, Petitioner
v.
FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors

No. 1999
CITY OF KANSAS CITY, MISSOURI, Petitioner
v.
FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors

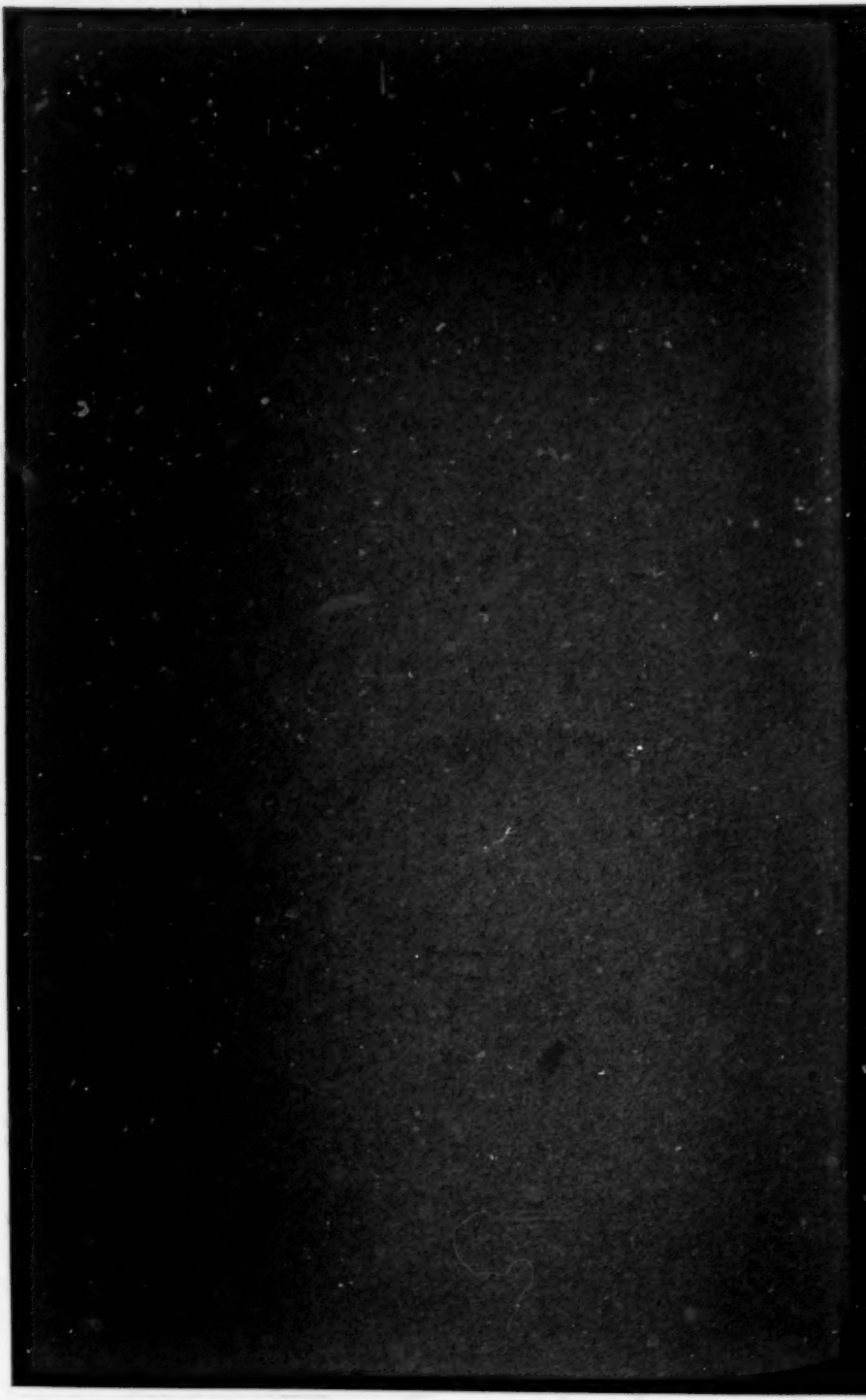
No. 2000
CITY OF MILWAUKEE, WISCONSIN, a Municipal Corporation, Petitioner
v.
FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY, Intervenor

No. 2001
COUNTY OF WAYNE, MICHIGAN, Petitioner
v.
FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors

Review of An Order of the Federal Power Commission

CONTENTS

Petitions for Review . . . Order of . . .
Testimony—Record Page . . .



BLEED THROUGH

Volume I

JOINT APPENDIX

BLEED THROUGH

INDEX

VOLUME I

	Record Page	Appendix Page
Joint and Several Petition of State of Wisconsin and Public Service Commission of Wisconsin to Review Orders of the Federal Power Commission in Its Docket G-1148, Filed November 20, 1951		1-33
Petition of City of Milwaukee to Review an Order of the Federal Power Commission in Its Docket No. G-1148 Relating to an Opinion and Order Entered by the Commission on August 16, 1951 (Order No. 217, Issued August 22, 1951), Filed November 15, 1951		34-43
Petition of City of Kansas City, Missouri, for Review of Order of Federal Power Commission, Filed November 14, 1951		44-56
Petition of the City of Detroit, Michigan, for Review of Order of Federal Power Commission, Filed November 14, 1951		57-72
Motion of Phillips Petroleum Company for Leave to Intervene, Filed January 29, 1952		72-77

	Record Page	Appendix Page
Order of United States Court of Appeals for the District of Columbia Circuit permitting Phillips Petroleum Company to Intervene, Dated February 9, 1952, Filed February 9, 1952		78-79
Motion of State of New Mexico, et al for Leave to Intervene, Filed February 5, 1952		80-84
Order of United States Court of Appeals for the District of Columbia Circuit permitting State of New Mexico and Oil Conservation Commission of State of New Mexico to Intervene, Dated March 3, 1952, Filed March 3, 1952		84-86
Motion of the Corporation Commission of the State of Oklahoma for Leave to Intervene, Filed April 9, 1952		87-96
Answer of State of Wisconsin and Public Service Commission of State of Wisconsin to Motion of the Corporation Commission of the State of Oklahoma for Leave to Intervene, Filed April 16, 1952		96-99
Motion of the State of Texas Through the Railroad Commission of Texas for Leave to Intervene, Filed April 10, 1952		100-106

BLEED THROUGH

	Record Page	Appendix Page
Stipulation With Respect to the Motion to Intervene of the State of Texas Through Its Railroad Commission and the Corporation Commission of the State of Oklahoma and the Motions of the State of Wisconsin and Its Public Service Commission to Dismiss the Aforesaid Motions to Intervene, Filed May 7, 1952		106-111
Order of the United States Court of Appeals for the District of Columbia Circuit Permitting Corporation Commission of State of Oklahoma to Intervene, Dated May 12, 1952, Filed May 12, 1952		111-114
Order of the United States Court of Appeals for the District of Columbia Circuit Permitting the State of Texas Through the Railroad Commission of Texas to Intervene, Dated May 12, 1952, Filed May 12, 1952		114-117
WITNESSES		
Testimony of:		
Marsh, Edward (Presiding Examiner-opening statement)	7-9	118-119
Luttring, Carl E.		
Direct examination by Mr. McAllister	94, 100 101-106 111-112	119-120 120-123 124

	Record Page	Appendix Page
Etchieson, W. S.		
Direct examination by Mr. McAllister	150-152	124-126
	170	126
	173	127
	176-178	127-129
	184-186	129
Walters, Mason G.		
Direct examination by Mr. McAllister	225-226	130
	250-252	130-132
	259-261	132-134
Etchieson, W. S. (recalled)		
Direct examination by Mr. McAllister	265	134
	292-302	134-142
	306-311	142-146
	317-319	146-148
	325-326	148
Cross examination by Mr. Sparks	327	148
	338-339	149-150
Adams, Kenneth S.		
Direct examination by Mr. McAllister	370	150
	407-413	150-155
	445-453	156-161
	455-457	161-163
	466-472	163-168
	505-507	168-170

BLEED THROUGH

	Record Page	Appendix Page
Etchieson, W. S.		
Direct examination (resumed) by Mr. McAllister	645-646	170
	657-658	171
	734-737	171-174
Cross examination by Mr. Sparks	744	174
	746-762	174-185
	766-767	185-186
	775-779	186-188
	917-919	188-190
Redirect examination by Mr. McAllister	934	190
	942-943	190
Walters, Mason G. (recalled)		
Direct examination (resumed) by Mr. McAllister	993-1001	191-196
Cross examination by Mr. Sparks	1001	197
Paris, A. W.		
Direct examination by Mr. McAllister	1002-1004	197-198
	1018-1020	198-200
	1034	200
	1045-1046	200-201
	1048-1049	201-202
	1082-1084	202-203
	1094-1095	204-205
	1103-1105	205-206
	1108-1112	206-209
	1116	209-210
	1119-1121	210-212

	Record Page	Appendix Page
Direct examination (resumed)		
by Mr. Perdue	1122-1124	213-215
	1131-1134	215-217
	1146-1148	217-218
Cross examination by Mr. Sparks	1157-1183	219-237
	1191-1198	238-243
Walters, Mason G. (recalled)		
Further direct examination by		
Mr. Purdue	1211	244
	1213-1216	244-246
Markley, Howard		
Direct examination by		
Mr. Purdue	1217-1220	246-248
	1225	248
	1227-1230	249-250
	1232	250-251
	1269-1274	251-255
	1301-1303	256-257
	1311-1315	257-261
	1341	261
	1344-1345	262
Examination by Mr. Torkelson	1372	262
	1379	262-263
Cross examination by Mr. Sparks	1380-1385	263-267
	1395-1396	267-269
	1425-1427	269-270
	1463-1466	270-273
Redirect examination by		
Mr. McAllister	1473	273
	1486-1488	273-275
	1541-1542	275-276

BLEED THROUGH

	Record Page	Appendix Page
Redirect examination (resumed) by Mr. McAllister	1545	276
	1555-1556	276-278
Examination by Mr. Torkelson	1562-1564	278-279
Examination by Mr. McAllister	1568-1569	279-280
Recross examination by Mr. Sparks	1569	280
Roth, George C.		
Direct examination by Mr. Joffee	1576-1587	281-288
	1590-1593	288-290
Cross examination by Mr. Sparks	1602-1604	291-292
	1657	292-293
Schumacher, A. H.		
Direct examination by Mr. Joffee	1666-1669	293-295
Stewart, Robert Boyd		
Direct examination by Mr. Purdue	1671	295
	1674	295-296
	1680	296
Walters, Mason G. (resumed)		
Redirect examination by Mr. McAllister	1744-1745	296-298
	1786-1787	298
	1789	298-299

	Record Page	Appendix Page
Rippel, A. M.		
Direct examination by Mr. Purdue	1796-1797	299-300
Markley, Howard (resumed)		
Examination by Mr. McAllister	1867	300
	1869-1870	300-301
	1881-1882	301-302
	1898, 1902	302
	1973, 1975	303
Rippel, A. M. (resumed)		
Direct examination by Mr. McAllister	1977-1982	303-306
	1985-1986	307-308
	1990-1993	308-310
	2014	310-311
	2020-2022	311-312
	2024-2026	313-314
	2030-2032	314-315
	2037-2038	315
	2093-2094	315-316
	2097-2098	317
	2103-2104	317-318
Bunn, George P.		
Direct examination by Mr. McAllister	2107-2108	319-320
	2121-2123	320-322
	2132-2134	322-323
	2136-2137	323-324
	2147-2148	324-326
Cross examination by Mr. Sparks	2157-2160	326-329

BLEED THROUGH

	Record Page	Appendix Page
O'Leary, Henry J.		
Direct examination by		
Mr. Honeck	2166, 2172	329
	2176	329
	2178	329-330
	2181-2185	330-334
Bunn, George P. (resumed)		
Redirect examination by		
Mr. McAllister	2221	334
	2256-2261	334-339
Recross examination by		
Mr. Sparks	2271-2272	339
	2284-2285	339-341
	2309	341
	2355-2358	341-343
	2421-2422	343-344
Stark, C. O. (resumed)		
Examination by Mr. Torkelson	2466	344
	2470-2471	344-345
	2726	345
Beall, K. E.		
Direct examination by		
Mr. Torkelson	2726-2727	345-346
	2729, 2732	346
Examination by Mr. McAllister	2733-2734	346-347
	2737	347-348
	2742, 2747	348
	2752	348
	2759-2760	349
	2812	349-350

	Record Page	Appendix Page
Bunn, George P. (resumed)		
Direct examination by Mr. Sparks	2813	350
	2819	350
	2923-2926	350-353
	2935	353
	2939-2940	353-354
	2949-2950	354-355
	2999-3000	355
	3049-3052	355-356
	3055-3058	356-359
	3094-3096	359-361
	3109-3111	361-363
	3140-3141	363
	3146-3147	363-364
	3208	364
	3257-3268	364-374

BLEED THROUGH

BLEED THROUGH

VOLUME I JOINT APPENDIX

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 11247

STATE OF WISCONSIN AND PUBLIC SERVICE COMMISSION OF WISCONSIN, Petitioners

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

No. 11241

CITY OF DETROIT, MICHIGAN, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

No. 11242

CITY OF KANSAS CITY, MISSOURI, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

No. 11245

CITY OF MILWAUKEE, WISCONSIN, a Municipal Corporation, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

No. 11252

COUNTY OF WAYNE, MICHIGAN, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

Review of An Order of the Federal Power Commission

CONTENTS

Petitions For Review **Orders of Intervention**

Testimony—Record Pages 1-3268

BLEED THROUGH

JOINT AND SEVERAL PETITION OF STATE OF WISCONSIN AND PUBLIC SERVICE COMMISSION OF WISCONSIN TO REVIEW ORDERS OF THE FEDERAL POWER COMMISSION IN ITS DOCKET G-1148

11,247

To the Honorable, the United States Court of Appeals for the District of Columbia Circuit:

The State of Wisconsin and Public Service Commission of Wisconsin file their joint and several petition under Section 19 (b) of the Natural Gas Act to review and set aside an order of the Federal Power Commission issued August 22, 1951 in connection with said Commission's Opinion No. 217, and the Commission's order denying the application of these petitioners for rehearing, which latter order was issued September 28, 1951, all of which was in a proceeding before said Commission entitled "In the Matter of Phillips Petroleum Company, Docket G-1148."

For their petition the State of Wisconsin and Public Service Commission of Wisconsin respectfully allege as follows:

1. Identity of Petitioners

(1) At all times herein mentioned the State of Wisconsin was and is one of the forty-eight sovereign states forming the United States of America. It appeared before the Federal Power Commission in the proceeding entitled "In the Matter of Phillips Petroleum Company, Docket G-1148" and it petitions and appears herein in its sovereign

capacity and by its agency, the Public Service Commission of Wisconsin, to protect a two-fold interest as follows: (a) as the representative of the consuming public which purchases natural gas in the State of Wisconsin from distributing companies located in such states, which companies in turn purchase said natural gas in the State of Wisconsin from Michigan-Wisconsin Pipe Line Company, which latter company in turn purchases its entire supply of said natural gas from Phillips Petroleum Company at a point in the State of Texas, and (b) as a user or consumer of natural gas purchased from a distributing company located in the State of Wisconsin (Madison Gas & Electric Company, Madison, Wisconsin), which distributing company purchases said gas from Michigan-Wisconsin Pipe Line Company as above stated, by virtue of its being the proprietor of certain public institutions, schools and buildings.

(2) The Public Service Commission of Wisconsin was at all times herein mentioned an agency of the State of Wisconsin created by and deriving its authority and powers from statutory grant by the Wisconsin Legislature. The authority and powers so granted the Public Service Commission of Wisconsin appear in Chapters 195 and 196 of the Wisconsin Statutes. Among other powers and authority given to said Commission is that which follows from Sections 195.01, 196.01, 196.02, 196.03, 196.20 and 196.37, Wisconsin Statutes, to regulate rates charged by and the adequacy of service furnished by public utilities located in the State of Wisconsin, including those which sell and deliver natural gas to the public for ultimate consumption for domestic, commercial, industrial or any other use, to the end that such rates shall be reasonable and just, and that such public utilities furnish reasonably adequate serv-

BLEED THROUGH

ice and facilities to the public. That the Public Service Commission of Wisconsin is a "state commission" within the meaning of the term as used in Sections 2 (8), 13 and 15 of the Natural Gas Act and Section 1.8 of the General Rules and Regulations and Rules of Practice and Procedure of the Federal Power Commission.

2. Nature of Proceedings As to Which Review Is Sought

(3) By order dated October 28, 1948, issued October 29, 1948, pursuant to authority granted it by the Natural Gas Act, the Federal Power Commission instituted an investigation of the natural gas operations of Phillips Petroleum Company to determine:

(i) Whether it is a "natural-gas company" within the meaning of the Natural Gas Act; and

(ii) Whether, in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, any rates, charges, or classifications demanded, observed, charged, or collected, or any rules, regulations, practices or contracts affecting such rates, charges, or classifications are unjust, unreasonable, unduly discriminatory, or preferential.

(4) On February 9, 1950 the Federal Power Commission issued another order in which reference was made, among other things, to complaints filed by the City of Detroit and Public Service Commission of Wisconsin and the results of field investigations made by the staff of the Federal Power Commission, as to the relation of Phillips

Petroleum Company to a number of pipe line companies. In referring to Michigan-Wisconsin Pipe Line Company, the Commission said:

"As stated above, the present annual sales capacity of 56,575,000 Mcf is proposed to be increased to 125,195,000 Mcf and it appears from staff estimates that the annual cost to Michigan-Wisconsin of 125,195,000 Mcf of natural gas which Phillips will supply to Michigan-Wisconsin under the contract of December 11, 1945, as amended, and the two new contracts of December 1, 1949, would be increased approximately $5,000,000 annually over the cost under the original contract. Furthermore, such contracts contain other provisions which, upon becoming operative in the future, may result in further substantial increases in the cost of gas to be supplied Michigan-Wisconsin.

"Phillips has contracted to sell and is selling large volumes of natural gas from the Panhandle and Hugoton gas fields to Panhandle Eastern Pipe Line Company, Northern Natural Gas Company, Independent Natural Gas Company, and El Paso Natural Gas Company at various prices substantially lower than the base prices specified in its contracts with Michigan-Wisconsin.

"Wherefore, it appears to the Commission that:

"It is necessary and desirable in the public interest that a public hearing be held to determine all relevant facts and circumstances surrounding the natural gas operations of Phillips Petroleum Company to enable the Commission to determine (a) Whether Phillips Petroleum Company is a 'natural-gas company' within the meaning of the Natural Gas Act; (b) Whether in connection with any transportation or sale of natural gas subject to the jurisdiction of the Commission, in-

BLEED THROUGH

cluding sales to Michigan-Wisconsin Pipe Line Company, any rates, charges, or classifications demanded, observed, charged, or collected by Phillips Petroleum Company, or any rules, regulations, practices, or contracts affecting such rates, charges, or classifications are unjust, unreasonable, unduly discriminatory or preferential.

"The Commission *orders*:

"(A) A public hearing be held commencing at 10 a. m. (CST) on March 20, 1950, in the Federal Court Room, U. S. Post Office Building, Bartlesville, Oklahoma, respecting all matters and issues set forth in this order and the Commission's order of investigation under date of October 28, 1948.

"(B) Interested State commissions may participate as provided by Sections 8 and 37 (f) [18 CFR 1.8 and 1.37 (f)] of the Commission's Rules of Practice and Procedure."

(5) After a number of adjournments the Federal Power Commission issued an order on February 28, 1951 setting the matter for hearing in Bartlesville, Oklahoma commencing April 3, 1951 at 10 a. m. Prior to said hearing a number of persons, including your petitioners, representing consumer interests, intervened in said proceeding, and are listed as follows:

Public Service Commission of Wisconsin

State of Wisconsin

City of Detroit, Michigan

County of Wayne, Michigan

City of Kansas City, Missouri

City of Milwaukee, Wisconsin

Michigan Public Service Commission

In addition there were other intervenors including the following:

State of New Mexico

State Corporation Commission, State of Kansas

Corporation Commission, State of Oklahoma

Railroad Commission of Texas

State of Texas

Oil and Gas Commission, State of Arkansas

Oil and Gas Board, State of Mississippi

Public Service Commission of West Virginia

Commissioner of Conservation, State of Louisiana

Texas County Land and Royalty Association

Texas Independent Producers and Royalty Owners Association

Certain Royalty Owners in Old Ocean Field Brasoria County, Texas

Old Ocean Royalty Owners

Independent Natural Gas Association of America

Port Neches Royalty Owners Association

(6) Prior to the hearing in Bartlesville, Oklahoma, on April 3, 1951, Phillips Petroleum Company filed a motion with the Federal Power Commission requesting it to amend its order of February 9, 1950 defining the issues so as to limit the issue to be considered at said hearing to a

BLEED THROUGH

determination whether it was a "natural gas company" within the meaning of the Natural Gas Act.

(7) Upon the opening of the hearing in Bartlesville, Oklahoma on April 3, 1951, the presiding examiner made the following statement (Tr. 7-9):

> "* * * I want to announce that I have received from the Secretary of the Commission the following memorandum, and I quote:
>
> " 'March 30, 1951, Memorandum for: Presiding Examiner Marsh, Bureau of Law, Bureau of Accounts, Finance and Rates.
>
> " 'For your information, the following is an excerpt from the minutes of a meeting of the Commission held on March 29, 1951: "The Commission had before it the Motion to Limit Issues filed on March 27, 1951, by Phillips Petroleum Company in Docket No. G-1148, but decided to defer action thereon until the other parties to the proceeding have had the opportunity provided for by the Rules to file answers to said motion. Upon motion of Commissioner Draper, seconded by Commissioner Wimberly, the Commission (Commission Buchanan dissenting) directed that, in the meantime, the Examiner designated to preside at the hearing in said proceeding scheduled to commence on April 3, 1951, be instructed to confine the taking of testimony to Paragraph (A) (i) of the order of the Commission entered October 28, 1948, and issued October 29, 1948." Signed Leon M. Fuquay, Secretary.' That memorandum was accompanied by a memorandum of transmittal, which reads as follows:
>
> " 'Because of time limitations, we will not be able to serve notice of this action upon the participants in the proceeding. I will, therefore, apreciate it if you

will have it spread upon the record at the opening of the hearing.'"

Thereupon your petitioners, the staff of the Federal Power Commission, the Cities of Milwaukee, Kansas City and Detroit, and possibly others, filed objection to said motion with the Federal Power Commission. On April 17, 1951 the Federal Power Commission issued an order (Commissioner Buchanan dissenting) limiting the issue at said hearing to the so-called "jurisdictional question," i. e., whether Phillips Petroleum Company is a natural gas company within the meaning of the Natural Gas Act. That said order reads in part as follows:

> "Upon consideration of the motion to limit issues filed herein by Phillips on March 27, 1951, of the Commission's orders issued herein, and all of the foregoing, the Commission *finds*:
>
> "(1) Although the Commission by order has set forth the issues to be heard herein, the order in which such issues shall be heard has not been prescribed.
>
> "(2) Orderly procedure requires that the following issue, heretofore set forth in the Commission's orders issued herein, first be heard at the hearing now in progress, viz: Whether Phillips Petroleum Company is a 'natural-gas company' within the meaning of the Natural Gas Act.
>
> "(3) Orderly procedure requires, and it is in the public interest, that hearing be held upon and a determination made by the Commission of the issue of whether Phillips Petroleum Company is a 'natural-gas company'

BLEED THROUGH

within the meaning of the Natural Gas Act, before hearing is held upon any other issue in this proceeding.

"(4) Hearing upon issues herein other than that set forth in paragraph (2) hereof should be held as soon as practicable after hearing upon said issue, at a time and place to be fixed by further order of the Commission.

"(5) The motion to limit issues filed by Phillips on March 27, 1951, should be granted to the extent hereinafter ordered, and in all other respects should be denied.

"The Commission *orders*:

"(A) The matters to be presented at the public hearing now in progress shall be only those relevant to the following issue set forth in the Commission's order of investigation issued October 29, 1948, to-wit: Whether Phillips Petroleum Company is a 'natural-gas company' within the meaning of the Natural Gas Act.

"(B) A public hearing he held upon the remaining issues set forth in the Commission's order of investigation issued October 29, 1948, at a time and place to be fixed by further order of the Commission.

"(C) The Motion to Limit Issues, filed herein by Phillips Petroleum Company on March 27, 1951, is granted to the extent herein ordered, and in all other respects is denied.

"By the Commission. Commissioner Buchanan dissenting."

(8) Following the completion of the hearing on the issue above stated, the so-called intermediate procedure provided for by the Rules of Practice and Procedure of the Federal Power Commission (see sec. 1.30 (c)) was dispensed with, and following the submission of briefs and oral argument before the Commission and order was issued by said Commission on August 22, 1951, based on alleged reasons stated in Opinion No. 217 and purported findings (Commissioner Buchanan dissenting and Commissioner Draper concurring in the result), which order reads as follows:

> "The Commission *orders*:
>
> "That the proceeding initiated by the Commission's order of October 28, 1948, in Docket No. G-1148 be, and the same hereby is, terminated.
>
> "By the Commission. Commissioner Draper concurring in the result. Commissioner Buchanan dissenting."

(9) Thereafter applications for rehearing from said Opinion and order were filed by the following parties on the dates specified:

Applicant	*Date*
State of Wisconsin and Public Service Commission of Wisconsin	September 17, 1951
City of Milwaukee, Wisconsin	September 12, 1951
City of Kansas City, Missouri	September 10, 1951
City of Detroit, Michigan	September 19, 1951
County of Wayne, Michigan	September 19, 1951

BLEED THROUGH

On September 28, 1951 the Federal Power Commission issued an order (Commissioner Buchanan dissenting) denying each of said applications for rehearing.

3. Facts and Statutes Upon Which Jurisdiction Is Based

(10) The proceeding here is to review the aforesaid order of the Federal Power Commission issued August 22, 1951 (Commissioner Buchanan dissenting) and order issued September 28, 1951 denying the applications of your petitioners and the others above mentioned for rehearing. Jurisdiction of this court to review said orders is established by Section 19 (b) of the Natural Gas Act.

(11) The State of Wisconsin is aggrieved by the aforesaid orders of the Federal Power Commission by which it refuses to assume jurisdiction over Phillips Petroleum Company as a "natural gas company" as defined by Section 2 (6) of the Natural Gas Act, and particularly by its refusal to assume jurisdiction over its sales of natural gas to (a) Michigan-Wisconsin Pipe Line Company, (b) El Paso Natural Gas Company, (c) Panhandle Eastern Pipe Line Company, (d) Independent Natural Gas Company for sale to Northern Natural, and (e) Cities Service Gas Company. After taking delivery of said natural gas, said pipe line companies carry the gas in pipe lines across state lines to markets in states other than those where Phillips sells and delivers the gas to the Pipe Line Companies, where the gas in turn is sold and delivered by the Pipe Line Companies to others who in turn sell and distribute said gas to the consuming public for domestic, commercial, industrial and other uses. Phillips Petroleum Company

concedes, and the Federal Power Commission found, that the sale of natural gas by Phillips to the five Pipe Line Companies above mentioned are each a sale of natural gas in interstate commerce for resale for ultimate consumption for domestic, commercial, industrial or other use. More specifically, so far as the situation in Wisconsin is concerned, the Federal Power Commission by its orders refused to take jurisdiction over the sale of natural gas by Phillips Petroleum Company to Michigan - Wisconsin Pipe Line Company in the State of Texas (which Phillips Petroleum Company admits and the Federal Power Commission found was a sale of natural gas in interstate commerce for purposes of resale). The pipe line company then transports the natural gas so purchased in pipe lines to points in the State of Wisconsin (as well as in other states) where it in turn sells said natural gas to distributing companies. Said companies in turn sell and deliver gas to the public for ultimate public consumption for domestic, commercial, industrial or other use in the State of Wisconsin as well as Michigan and other states. Phillips Petroleum Company is the sole supplier of all natural gas transported by Michigan-Wisconsin Pipe Line Company (delivering up to 343,000 Mcf per day) and said pipe line company in turn is the sole supplier of natural gas to local distributing companies serving the Cities of Madison (Madison Gas and Electric Company) and Milwaukee (Milwaukee Gas Light Company), the two principal cities in Wisconsin, as well as those serving other communities along the shore of Lake Michigan and the Fox River Valley Area, the principal industrial areas of the state. Consumers in such areas form a substantial portion of the population of the State of Wisconsin.

BLEED THROUGH

(12) The price which Michigan-Wisconsin Pipe Line Company pays Phillips Petroleum Company becomes a factor in the amount the ultimate consumer in Wisconsin must pay for natural gas in said state.

(13) The State of Wisconsin here petitions and appears in this court in its sovereign capacity to represent and protect as *parens patriae* the interest of the consuming public in Wisconsin which uses natural gas transported into the state purchased by Michigan-Wisconsin Pipe Line Company. *Georgia v. Pennsylvania Railroad Co.*, 324 U. S. 439.

(14) The State of Wisconsin is also the proprietor of institutions, schools and buildings and by reason thereof is itself a consumer of natural gas purchased from Madison Gas and Electric Company (among other companies) which in turn purchases its entire supply of natural gas from Michigan-Wisconsin Pipe Line Company. In the period from December, 1949, when natural gas was first introduced in Madison, Wisconsin, through March 31, 1951, the State of Wisconsin purchased the following quantities of natural gas from Madison Gas and Electric Company:

	Amount of Gas	*Cost*
State of Wisconsin, for Executive Mansion	1,472.8 Mcf	$ 1,558.10
State of Wisconsin, for University of Wisconsin	12,482.7 Mcf	$13,479.84

(15) The price which Phillips Petroleum Company charges Michigan-Wisconsin Pipe Line Company was and is excessive and discriminatory. For the year ended December 31, 1950, the natural gas department of Phillips

Petroleum Company earned a return in excess of 16.5% on a rate base consisting of a net investment as per its books plus an allowance for materials and supplies and working capital. This is shown by Exhibits 3 to 7 prepared and offered by the staff of the Federal Power Commission in the proceeding before the Commission in said Docket G-1148, which were excluded from the record by the presiding examiner on the alleged ground they were not material to the jurisdictional issue. Said exhibits were later adopted by Wisconsin as its own exhibits and an offer of proof made (Tr. 5763) on the ground they were material to the jurisdictional issue as showing the impact of an unregulated price between Phillips and the pipe line companies upon the ultimate consumer, and the latter's interest in and need for regulation. See Section 1 (a), Natural Gas Act, and *Interstate Natural Gas Co. v. Federal Power Commission,* 331 U. S. 682, 693. The record in Docket G-1148 further shows that the original contract of December 11, 1945 provided that Phillips supply Michigan-Wisconsin Pipe Line Company up to specified quantities of gas at 5-cents Mcf for the first 5 years beginning July 1, 1948. Then by amendment of August 9, 1948 the price was increased to 8½-cents Mcf with a 1-cent increase for each successive 5-year period. Said amendment included an escalator clause which would bring increased revenue to the company in an amount ranging between $15 and $20 million over the life of the contract. There were also subsequent amendments, the effect of which nearly doubled the cost of gas to Michigan-Wisconsin. Prior to the amendment of August 9, 1948 Phillips expected to realize a return of 9.5%, whereas after the amendment the expected return would be 13.76%. The record in Docket G-1148 also shows

BLEED THROUGH

that as part of its operations Phillips "farmed out" 100 square miles of proven acreage under a lease of such acreage to Tascosa Gas Company (Exhibit 60). By this "farm-out" Tascosa drills the wells, and resells the gas to Phillips at a price which produces a handsome profit to Tascosa. Thus we have a superfluous middleman in the picture also taking its profit, which, if eliminated, would decrease the amount which Phillips charges said pipe line companies and still permit a fair return.

(16) Undue discrimination as to the price Phillips charges Michigan-Wisconsin Pipe Line Company, as compared to the other pipe line companies it sells gas to, is shown by the figures taken from Exhibit 54 in Docket G-1148 as follows:

	Gasoline Plant	*1950 Average Price Mcf.*
Michigan-Wisconsin	Sherman	8.17 cents
Panhandle Eastern	Hansford	4.03 "
	Borger Residue System	4.03 "
El Paso Natural Gas Co.	Crane	4.69 "
	Eunice	3.81 "
	Fullerton	4.07 "
	Goldsmith	4.92 "
	Borger Residue System	5.05 "
Independent Natural Gas Co.	Pampa Residue System	2.45 "

The average price on the total sales of residue gas by Phillips for the year 1950 was 5.38-cents Mcf. Michigan-Wisconsin paid 8.17-cents.

(17) The State of Wisconsin in its sovereign capacity as *parens patriae* for consumers of natural gas in Wisconsin and also as a consumer of natural gas itself is aggrieved by the failure of the Federal Power Commission, in issuing the orders previously mentioned, to determine that it has jurisdiction over Phillips Petroleum Company as a "natural gas company" as defined in Section 2 (b) of the Natural Gas Act; and is further aggrieved by the failure of said Commission to take jurisdiction over Phillips' sale of natural gas to the pipe line companies previously mentioned and by said Commission's failure to regulate the price or rate charged by Phillips for such gas, and particularly the sale to Michigan-Wisconsin Pipe Line Company. By such failure to take jurisdiction, there is precluded any possibility of (1) securing a reduction in the excessive rates and charges which Phillips exacts from Michigan-Wisconsin and the other named pipe line companies; and (2) effecting an elimination of the unduly discriminatory rate or charge which now exists as between the rates or charges exacted by Phillips from Michigan-Wisconsin Pipe Line Company as compared to the other pipe line companies.

(18) The Public Service Commission of Wisconsin is an agency of the State of Wisconsin. By statutes enacted by the legislature of the State of Wisconsin (Chapters 195 and 196, Wisconsin Statutes), said Commission is given power and authority to regulate the rates and charges exacted by and the service rendered by public utilities operating in the State of Wisconsin, and specifically has jurisdiction

BLEED THROUGH

given by Sections 196.01 (1), 196.03 (1), 196.20 and 196.37 to regulate the rates and charges imposed by public utilities in Wisconsin for sale of natural gas to consumers within said state, to the end that rates and charges for sale of natural gas must be "just and reasonable" and the service rendered by public utilities selling natural gas shall be reasonably adequate. As such it is a "state commission" as defined by Section 2(8) of the Natural Gas Act and has the right (as also does the State of Wisconsin) to file a complaint with the Federal Power Commission against the rate or charge of any natural gas company in connection with the transportation or sale of natural gas. See Sections 5 (a), 4 (e), 13. As a state commission it is authorized to intervene in a proceeding before the Federal Power Commission as a matter of right by Section 1.8 of the Federal Power Commission Rules of Practice and Procedure. See Title 15 U. S. C. A. §717n.

(19) The Public Service Commission of Wisconsin herein petitions and appears with the State of Wisconsin as a representative of the consumers of natural gas in Wisconsin served by distributing companies which receive gas from Michigan-Wisconsin Pipe Line Company, and also in its capacity as a state regulatory agency having the jurisdiction above mentioned. Said Commission is aggrieved by the orders of the Federal Power Commission previously mentioned in the same manner alleged in paragraph numbered 17, *supra*. Said Commission is further aggrieved by reason of the fact that the refusal of the Federal Power Commission to accept such jurisdiction establishes a "gap" in the regulatory scheme (the price at the city gate being regulated by Federal Power Commission and to the ultimate consumer in Wisconsin by the Public Service Com-

mission of Wisconsin) which impairs and prejudices the regulatory effort by the Public Service Commission of Wisconsin. Excessive and discriminatory charges at that stage, i. e., the sale by Phillips to the pipe line company, become perpetuated in the ultimate cost (see *Interstate Natural Gas Co. v. Federal Power Commission*, 331 U. S. 682, 693) and necesarily compel the Public Service Commission of Wisconsin to fix a rate to the ultimate consumer which is higher than would or should otherwise be required.

(20) The status of the State of Wisconsin and the Public Service Commission as an aggrieved party also is recognized in Section 19 (a) of the Natural Gas Act which reads as follows:

> "Any person, State, municipality, or State commission aggrieved by an order issued by the Commission in a proceeding under this act to which such person, State, municipality or State Commission is a party may apply for a rehearing within thirty days after the issuance of such order. * * *"

(21) The foregoing, taken in conjunction with the provisions authorizing *inter alia* the filing of complaints by any state, state commission, or municipality (Sections 5 (a), 4 (e) and 13), evidences the intent of Congress that a state regulatory commission (as well as the state or any municipality) is aggrieved as a representative of the consuming public, when, by reason of a ruling of the Federal Power Commission, said consumers are deprived of the benefit of rate reduction and the establishment of a just and reasonable and nondiscriminatory rate. A state regulatory commission is not ordinarily a consumer of natural gas. The possibility that it may be aggrieved is

BLEED THROUGH

definitely recognized in Section 19 (a). Because of the unlikelihood of a state commission being a consumer of natural gas, it is plain it must be aggrieved in the respects above mentioned. See *Federal Communications Commission v. Sanders Radio Station*, 309 U. S. 470; *Scripps-Howard Radio Inc. v. Federal Communications Commission*, 316 U. S. 4; Associated Industries v. Ickes, 134 F. 2d 694 (C. C. A. 2), vacated and remanded on other grounds, 320 U. S. 707.

4. The Relief Prayed

(22) The relief prayed by your petitioners herein is that the aforesaid order of the Federal Power Commission in its Docket G-1148 issued August 22, 1951, and the order dated September 28, 1951 denying the applications of petitioners and others for rehearing, be set aside in their entirety.

5. The Points Upon Which Petitioners Intend to Rely

(23) The points upon which the State of Wisconsin and Public Service Commission of Wisconsin intend to rely in prosecution of their petition for review in this court are those stated in their joint application and petition for rehearing duly and timely filed with the Federal Power Commission, which will be part of the record which will be filed and certified with the court as provided in Section 19 (b) of the Natural Gas Act, which application and petition for rehearing is incorporated into this petition by reference with the same force and effect as if physically included herein. A concise statement of said points is as follows:

I.

PHILLIPS PETROLEUM WAS AND IS A NATURAL GAS COMPANY AS DEFINED IN SECTION 2 (6) OF THE NATURAL GAS ACT, AND THE FEDERAL POWER COMMISSION ERRED IN CONCLUDING CONTRARYWISE

1. Phillips Petroleum Company admits, and the Federal Power Commission correctly states in its Opinion No. 217, that sales of natural gas by Phillips Petroleum Company to the five pipe line companies involved are sales of natural gas in interstate commerce for purpose of resale for ultimate public consumption for domestic, commercial, industrial or any other use.

2. The Federal Power Commission also correctly found that the movement of natural gas by Phillips Petroleum Company to the points of sale to the five pipe line companies involved constitutes transportation of natural gas in interstate commerce as a matter of constitutional law.

3. Such sales and transportation are each subject to Federal Power Commission jurisdiction by reason of the provisions of Section 1 (b) of the Natural Gas Act. Existence of either such sales or such transportation makes Phillips Petroleum Company a natural gas company as defined in Section 2 (6) of the Natural Gas Act.

a. Section 1 (b) applies to three separate things:

(1) The transportation of natural gas in interstate commerce.

(2) Its sale in interstate commerce for resale.

BLEED THROUGH

(3) Natural gas companies engaged in such transportation or sale.

Transportation and sale are viewed as separate subjects of regulation. They have independent and equally important places in the Act. The Federal Power Commission erred as a matter of law in failing to find that by virtue of the foregoing premises Phillips is a "natural gas company" and subject to the jurisdiction of the Commission in the respects provided in the Natural Gas Act.

II.

AS A MATTER OF LAW THE SALES IN QUESTION ARE NOT PART OF "PRODUCTION OR GATHERING" WITHIN THE MEANING OF SECTION 1 (b) OF THE NATURAL GAS ACT, AND THE FEDERAL POWER COMMISSION ERRED AS A MATTER OF LAW IN CONCLUDING TO THE CONTRARY

1. The above proposition is established beyond all doubt by the decisions of the Federal Power Commission, the Court of Appeals for the Fifth Circuit, and the United States Supreme Court in the *Interstate Case. In the Matter of Interstate Natural Gas Co. v. Federal Power Commission,* D. C.) 127 F. 2d 153, hearing denied F. 2d 157, certiorari *Federal Power Commission,* 331 U. S. 682.

2. All hold as a matter of law the sales of natural gas in interstate commerce for purpose of resale are not included in the phrase "production or gathering" contained in Section 1 (b). The same proposition follows from *Peoples*

Natural Gas Co. v. Federal Power Commission, (U. S. App. D. C.) 127 F. 2d 153, hearing denied 127 F. 2d 157, certiorari denied 316 U. S. 700.

3. The basic purpose of the Natural Gas Act was to fill the "gap" created by the decisions of the Supreme Court in *Missouri v. Kansas Natural Gas Co.,* 265 U. S. 298, and *Public Utilities Commission v. Attleboro Steam & Electric Co.,* 273 U. S. 83, and *State Corp. Commission v. Wichita Gas Co.,* 290 U. S. 561, to the effect that the states could not constitutionally regulate sales of wholesale quantities of natural gas (not local in character) at interstate commerce for purposes of resale even in the absence of congressional action.

4. As applied here, this means that the sales of natural gas by Phillips Petroleum Company to the five pipe line companies (i. e., Michigan-Wisconsin Pipe Line Company, El Paso Natural Gas Company, Panhandle Eastern Pipe Line Company, Independent Natural Gas Company for Northern Natural Gas Company, and Cities Service Gas Company) for purposes of resale (involving as they do enormous quantities of gas and being the sole supplier of gas for distributing companies located in distant states), are transactions national, and not local, in character, and hence beyond the constitutional power of the state's regulation even in the absence of congressional action.

5. Because the states cannot constitutionally regulate the sales by Phillips Petroleum Company to the five pipe line companies, such sales cannot fall within the language of "production or gathering" as it appears in Section 1 (b), and the Supreme Court so held in *Interstate Natural Gas Company v. Federal Power Commission,* 331 U. S. 682, 690.

BLEED THROUGH

6. The case of *Cities Service Gas Co. v. Peerless Oil & Gas Co.*, 340 U. S. 179, cannot in any way be construed as holding that the states can now constitutionally regulate the sales by Phillips in interstate commerce to the five pipe line companies involved here for purposes of resale.

III.

ALTHOUGH UNNECESSARY SO TO CONTEND (SINCE THE QUESTION MUST BE DECIDED ADVERSELY TO THE COMMISSION'S DETERMINATION THAT THE SALES TO THE FIVE PIPE LINE COMPANIES ARE NOT PART OF "PRODUCTION OR GATHERING" AS A MATTER OF LAW), THE COMMISSION'S DETERMINATION THAT SUCH SALES ARE PART OF "PRODUCTION OR GATHERING" IS CONTRARY TO SUBSTANTIAL EVIDENCE IN THE RECORD

1. The question as to what is included within the term "production or gathering" as used in Section 1 (b) depends upon the intention of Congress in enacting this section. As shown under previous subheads, the sales by Phillips to the five pipe line companies cannot be included in the term "production or gathering" as a matter of law.

2. In any event, the question is one of application of a legal standard and cannot be concluded by expert testimony.

3. Opinion evidence that is inconsistent with undisputed facts or with reason and common sense is not adequate to meet the requirements of "substantial evidence."

4. The testimony of witnesses A. R. Rippel and George P. Bunn, employes of Phillips Petroleum Company, to the effect that the sales to the five pipe line companies are included within "production or gathering" are (a) inconsistent with undisputed facts and (b) contrary to reason and common sense, and are inadequate and cannot be considered as substantial evidence.

IV.

THE DETERMINATION OF THE FEDERAL POWER COMMISSION THAT THE SALES BY THE PHILLIPS PETROLEUM COMPANY TO THE FIVE PIPE LINE COMPANIES ARE SO CLOSELY CONNECTED WITH THE LOCAL INCIDENTS OF "PRODUCTION OR GATHERING" AS TO RENDER RATE REGULATION BY IT INCONSISTENT WITH OR A SUBSTANTIAL INFERENCE WITH THE EXERCISE BY THE STATES OF OKLAHOMA, TEXAS AND NEW MEXICO OF THEIR REGULATORY FUNCTIONS IS ERRONEOUS AS A MATTER OF LAW

1. In arriving at the above conclusion the Federal Power Commission erroneously assumes that the states could in any event regulate the sales in question. This is not true as a matter of constitutional law.

The language of the supreme court at p. 690 of 331 U. S. referring to "sales, though technically consummated in interstate commerce, are made during the course of production and gathering and are so closely connected with

BLEED THROUGH

the local incidents of that process as to render rate regulation by the Federal Power Commission inconsistent or a substantial interference with the exercise by the State of its regulatory functions, the jurisdiction of the Federal Power Commission does not attach." It does not and cannot refer to the sales by Phillips to the five pipe line companies, since simple logic decrees that the court in using such language could only mean sales which could constitutionally be regulated by the states.

2. "Local incidents" of the process of "production or gathering" are not included within sales of natural gas in interstate commerce for purposes of resale. They are wholly different concepts.

3. If Federal Power Commission regulation can be successfully denied on ground of interference with state regulation in the present case, the Federal Power Commission is ousted of jurisdiction in all cases. Such a claim would be contrary to decisions of the supreme court sustaining Federal Power Commission jurisdiction in cases where it is asserted that it does not exist by virtue of interference with state regulatory efforts. *Colorado Interstate Gas Co. v. Federal Power Commission,* 324 U. S. 581; *Canadian River Gas Co. v. Federal Power Commission,* 324 U. S. 581; *Federal Power Commission v. Hope Natural Gas Co.,* 320 U. S. 591; *Interstate Natural Gas Co. v. Federal Power Commission,* 331 U. S. 682, same case C. C. A., 156 F. 2d 949.

V.

ALTHOUGH UNNECESSARY TO SO CONTEND (BECAUSE THE FEDERAL POWER COMMISSION'S DETERMINATION THAT ITS JURISDICTION OVER SALE BY PHILLIPS TO THE FIVE PIPE LINE COMPANIES WILL INTERFERE WITH STATE REGULATORY EFFORTS IS ERRONEOUS AS A MATTER OF LAW), THE DETERMINATION OF THE COMMISSION THAT ITS ASSUMPTION OF JURISDICTION OVER SUCH SALES WOULD INTERFERE WITH STATE REGULATORY EFFORTS IS CONTRARY TO SUBSTANTIAL EVIDENCE IN THE RECORD

1. The Federal Power Commission fails to state valid reasons for a purported finding or conclusion that its assumption of jurisdiction over the sale by Phillips to the five pipe line companies will interfere with state regulatory efforts, and also fails to refer to any facts on which such finding could be based. The dissenting opinion of Commissioner Buchanan correctly suggests that the Commission's determination rests upon bare assertion—"their own *ipsi dixit.*"

2. All witnesses who testified upon the subject of alleged conflict between Federal Power Commission jurisdiction over the sales in question and interference with state regulatory efforts were unable to point out any actual conflict. The only mention of conflict was based upon hypothetical and assumed situations, none of which were shown to exist.

BLEED THROUGH

3. The evidence shows without question that the Federal Power Commission has taken jurisdiction over a number of companies which engage in substantial field operations similar to those carried on by Phillips Petroleum Company which are also subject to jurisdiction by regulatory agencies of the States of Texas, Oklahoma and New Mexico, and no conflict was shown to exist between Federal Power Commission jurisdiction in those cases and that of regulatory commissions.

VI.

THE ATTEMPT OF THE FEDERAL POWER COMMISSION TO CONSTRUE SEC. 1 (b) OF THE ACT BY RESORT TO LEGISLATIVE HISTORY, AND BY REVIEW OF ADMINISTRATIVE AND JUDICIAL DECISIONS WAS ERROR AS A MATTER OF LAW, BECAUSE A STATUTE CLEAR AND UNAMBIGUOUS ON ITS FACE NEED NOT, AND AS A MATTER OF LAW, CANNOT BE "INTERPRETED" BY AN ADMINISTRATIVE AGENCY TO CONTRADICT THE CLEAR LANGUAGE OF THE STATUTE

A. Resort to Legislative History was Erroneous as Matter of Law

In any event, if the legislative history of the Natural Gas Act in any way forms part of the conclusions reached by the Federal Power Commission in the instant case, the Commission has erred in so interpreting such history. The legislative history clearly supports the proposition that the basic purpose of the Natural Gas Act was to fill the "gap"

created by decisions of the supreme court above mentioned and to make the sales of natural gas for purposes of resale of the kind made by Phillips Petroleum Company to the five pipe line companies here involved subject to Federal Power Commission regulation.

B. Resort to "Administrative Actions" Was Erroneous as Matter of Law

While it is not clear what purpose the Commission had in so doing, we submit that if such purpose was to establish an administrative interpretation claimed to be binding or persuasive in the present case, the Commission has erred.

1. The rule of administrative interpretation is one of many qualifications and in many instances the courts refuse to follow it. In any event, it can have no application here because (a) the material portion of the Natural Gas Act is plain and unambiguous and not subject to construction, and (b) the course followed by the Federal Power Commission in administering the portion of the Natural Gas Act material here does not meet the requirements that to make the rule applicable the administrative construction, first, must not be contrary to the language of the statutes or erroneous and, second, must be uniform and of long standing.

C. Review of Judicial Decisions Was Error as Matter of Law

In support of its several erroneous findings of fact and conclusions of law, the Federal Power Commission, in its

BLEED THROUGH

Opinion No. 217, has presumed to review the several judicial decisions rendered in cases involving Sec. 1 (b) of the Natural Gas Act, and to apply to the facts of the instant proceeding its erroneous concept of the meaning and effect of said decisions. In so doing said Commission erred in failing to conclude that said decisions compel the legal conclusion that Phillips' sales of natural gas to the five pipe line companies and the transportation of natural gas in interstate commerce are not part of production and gathering within the meaning of Sec. 1(b).

VII.

THE COMMISSION HAS ERRED IN FAILING TO MAKE PROPER FINDINGS OF FACT AND CONCLUSIONS OF LAW ACCORDING TO STANDARDS LAID DOWN BY CONGRESS, [15 U. S. C. A. §717r (b), 4 F. C. A. title 15, 717r (b)] AS INTERPRETED BY THE UNITED STATES SUPREME COURT

The failure to make proper findings of fact in the respects specified herein, in and of itself constitutes error. *Colorado-Wyoming Gas Co. v. F. P. C.*, 324 U. S. 626, 634.

VIII.

THE COMMISSION ERRED IN ITS RULING LIMITING THE ISSUE TO THE SO-CALLED JURISDICTONAL ISSUE

The Commission erred in directing its Trial Examiner by its order of April 6, 1951, to exclude all evidence to

determine whether any of Phillips' rates, subject to the Commission's jurisdiction, are unjust or unreasonable, and further erred in approving the exclusion of substantial evidence offered by the staff of the Commission at such hearing showing that Phillips' rates are in fact unjust and unreasonable, because such action of the Commission was arbitrary and capricious, contrary to law and in violation of the express terms of the Natural Gas Act.

WHEREFORE, your petitioners, jointly and severally, pray that the court review the orders of the Federal Power Commission in the latter's Docket G-1148 which are complained of, and that the court set aside such orders in their entirety.

Dated at Madison, Wisconsin, this 13th day of November, 1951.

STATE OF WISCONSIN

By WALTER J. KOHLER, JR. /s/
Walter J. Kohler, Jr., Governor

VERNON W. THOMSON /s/
Vernon W. Thomson, Attorney General, and Its Attorney of Record.

VERNON W. THOMSON,
Attorney General,

STEWART G. HONECK,
Deputy Attorney General,

Attorneys for State of Wisconsin.

P. O. Address:
State Capitol,
Madison, Wisconsin

BLEED THROUGH

PUBLIC SERVICE COMMISSION OF WISCONSIN

JOHN C. DOERFER /s/
John C. Doerfer, Commissioner

W. F. WHITNEY /s/
W. F. Whitney, Commissioner

JAMES R. DURFEE /s/
James R. Durfee, Commissioner

WILLIAM E. TORKELSON
Attorney for Public Service Commission of Wisconsin

P. O. Address:
1 West Wilson Street,
Madison, Wisconsin

STATE OF WISCONSIN }
COUNTY OF DANE } ss.

WALTER J. KOHLER, Jr., being first duly sworn on oath says that he is the duly elected, qualified and acting Governor of the State of Wisconsin; that he makes this verification in behalf of said State, being duly authorized so to do; that he has read the foregoing petition and knows the contents thereof and believes it to be true; that the reason that this verification is made by affiant and not by the State of Wisconsin is that said State is one of the sovereign states of the United States and can act only through its duly authorized agents and officers.

WALTER J. KOHLER, JR. /s/
Walter J. Kohler, Jr.

Subscribed and sworn to before me this
13th day of November, A. D., 1951.

ELSIE ELLEFSON /s/
Notary Public, Dane Co., Wisconsin
My comm. expires April 27, 1952.
(NOTARIAL SEAL)

STATE OF WISCONSIN }
COUNTY OF DANE } ss.

VERNON W. THOMSON, being first duly sworn on oath says that he is the duly elected, qualified and acting Attorney General of the State of Wisconsin; that he makes this verification in behalf of said State, being duly authorized so to do; that he has read the foregoing petition and knows the contents thereof and believes it to be true; that the reason that this verification is made by affiant and not by the State of Wisconsin is that said State is one of the sovereign states of the United States and can act only through its duly authorized agents and officers.

VERNON W. THOMSON /s/
Vernon W. Thomson

Subscribed and sworn to before me this
13th day of November, A. D., 1951.

IONA FARRELL /s/
Notary Public, Dane Co., Wisconsin
My comm. expires March 1, 1953.
(NOTARIAL SEAL)

BLEED THROUGH

STATE OF WISCONSIN)
COUNTY OF DANE) ss.

JOHN C. DOERFER, W. F. WHITNEY and JAMES R. DURFEE, being each duly sworn on oath says for himself that he is a duly appointed, qualified and acting Commissioner of the Public Service Commission of Wisconsin; that he has read the foregoing petition, knows the contents thereof, and believes the same to be true.

JOHN C. DOERFER /s/
John C. Doerfer

W. F. WHITNEY /s/
W. F. Whitney

JAMES R. DURFEE /s/
James R. Durfee

Subscribed and sworn to before me this
13th day of November, A. D., 1951.

FREDA MILES /s/
Notary Public, Dane Co., Wisconsin
My comm. expires October 2, 1955.
(NOTARIAL SEAL)

PETITION OF CITY OF MILWAUKEE TO REVIEW AN ORDER OF THE FEDERAL POWER COMMISSION IN ITS DOCKET NO. G-1148 RELATING TO AN OPINION AND ORDER ENTERED BY THE COMMISSION ON AUGUST 16, 1951 (ORDER NO. 217, ISSUED AUGUST 22, 1951)

11,245

To the Honorable, the Judges of the United States Court of Appeals for the District of Columbia:

The City of Milwaukee files its petition under Section 19 of the Natural Gas Act to review and set aside an order of the Federal Power Commission dated August 16, 1951, and issued by said Federal Power Commission on August 22, 1951, in connection with the Federal Power Commission's opinion No. 217 and the Federal Power Commission's order terminating the proceedings initiated by said Commission's order of October 28, 1948, and from an order of the Federal Power Commission denying the petition and application of the above named petitioner, the City of Milwaukee, for rehearing, which latter order was dated September 22, 1951, and issued by the Federal Power Commission on September 28, 1951, all of which were and occurred in a proceedings entitled "In the Matter of Phillips Petroleum Company," Docket No. G-1148.

For its petition, the City of Milwaukee respectfully alleges as follows:

1. Identity of Petitioner

That at all times hereinafter mentioned, the City of Milwaukee was and now is a municipal corporation organ-

BLEED THROUGH

ized and existing under and by virtue of the laws of the State of Wisconsin; that the City of Milwaukee derives its powers from the State of Wisconsin and from the acts of the Legislature of such State; that among its powers it has a right to be represented by counsel in matters which involve the public interest; that it has a population of 632,651.

That the City of Milwaukee is a large purchaser of natural gas from the Milwaukee Gas Light Company, a local public utility; that such gas is consumed and used by the City of Milwaukee, and that the City of Milwaukee pays a consideration therefor to the Milwaukee Gas Light Company; that the rates of the Milwaukee Gas Light Company are in some part determined by the rates charged by Phillips Petroleum Company; that a decrease in the rates charged by Phillips Petroleum Company to the Michigan-Wisconsin Pipe Line Company may directly affect the rate to the City of Milwaukee; that the failure to regulate rates by the Federal Power Commission, therefore, has an effect upon the price of natural gas to the City of Milwaukee; that under the provisions of the Natural Gas Act (52 Stat. 833; title 15 U. S. C. 717-717W), Section 2 (3) thereof, a "municipality" is defined to mean a city; that a municipality under the provisions of Section 5 (a) of the Natural Gas Act may file a complaint with the Federal Power Commission respecting any rate, charge, or classification demanded, charged, or collected by any natural gas company in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission.

That under the provisions of Section 13 of the Natural Gas Act, a municipality complaining of anything done or

omitted to be done by any natural gas company in contravention of the provisions of the Natural Gas Act may apply to the Federal Power Commission by petition; that the City of Milwaukee did properly intervene in the proceedings before the Federal Power Commission in the matter of Phillips Petroleum Company, Docket No. G-1148.

That as a further basis of interest in the above entitled proceedings and in the proceedings had before the Federal Power Commission, the City of Milwaukee demonstrates that it has many thousands of inhabitants daily purchasing natural gas from the Milwaukee Gas Light Company, a local utility, which utility purchases its gas from the Michigan-Wisconsin Pipe Line Company, the latter purchasing its gas from the Phillips Petroleum Company; that the public residing within the boundaries of the City of Milwaukee is affected by the rates charged by Phillips Petroleum Company, and that any decrease or increase in rates tends to affect the ultimate price of natural gas to the many thousands of consumers residing within the City of Milwaukee as aforesaid.

2. Nature of Proceedings As to Which Review is Sought

That on August 22, 1951, the Federal Power Commission, hereinafter referred to as the "Commission," issued an order in Docket No. G-1148, entitled "In the Matter of Phillips Petroleum Company," in which said Commission ordered as follows:

> "That the proceeding initiated by the Commission's order of October 28, 1948, in Docket No. G-1148 be, and the same hereby is, terminated.";

BLEED THROUGH

that said Commission found in said proceedings as follows:

"(1) Phillips Petroleum Company is engaged in the 'production and gathering' of natural gas within the meaning of Section 1(b) of the Natural Gas Act.

"(2) Phillips' movement of gas in interstate commerce and its sales thereof for resale in interstate commerce, together with its processing operations, all constitute a part of its gathering business, so that such movement, processing, and sales come within the exemption of production and gathering in Section 1(b) of the Act.

"(3) Phillips Petroleum Company is not a 'natural-gas company' within the meaning of Sections 1(b) or 2(6) of the Natural Gas Act.";

that the City of Milwaukee properly and duly intervened in said proceedings before said Commission as aforesaid, and was allowed to intervene by action of said Commission; and that the City of Milwaukee has a vital and real interest in the proceedings and is vitally affected by the determination, ruling, and order of said Commission, and feels itself aggrieved thereby; that contrary to the provisions of law said Commission refused to accept jurisdiction of the subject matter of the proceedings in the matter of Phillips Petroleum Company, Docket No. G-1148, hereinbefore referred to.

That on August 22, 1951, as aforesaid, said Commission issued its opinion, No. 217, and its order hereinbefore referred to, and made the findings hereinbefore set forth; that the City of Milwaukee filed timely application and petition for rehearing as is provided for by the provisions of the Natural Gas Act, and that on September 28, 1951,

with respect to such application and petition, said Commission ruled as follows:

"(1) No facts and no principles of law have been presented in said applications or any of them which either were not fully considered by the Commission before it entered such opinion and order, or, having now been considered, justify a reversal or modification of the Commission's opinion and order.

"(2) Good cause exists for denying said applications."

3. Facts and Statutes Upon Which Venue is Based

That venue is established by Section 19(b) of the Natural Gas Act, which provides that any party to a proceeding under the Natural Gas Act aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the United States Court of Appeals for the District of Columbia by filing in such court within sixty (60) days after the order of the Commission, upon application for rehearing, and upon written petition praying that the order of the Commission be modified or set aside in whole or in part; that the City of Milwaukee feels itself aggrieved by the aforesaid order of the Commission, and that it therefore seeks a review of such order pursuant to said Act.

4. Relief Prayed For

Relief prayed for by your petitioner herein is that the aforesaid order of said Commission in Docket No. G-1148, dated August 16, 1951, and issued by the Commission on

BLEED THROUGH

August 22, 1951, denying said Commission has jurisdiction under the Natural Gas Act in the aforesaid proceedings, and the order of said Commission of September 27, 1951, issued September 28, 1951, in which said Commission denied the application and petition of the City of Milwaukee, for rehearing, be set aside in their entirety as being contrary to law.

5. The Points Upon Which Petitioner Intends to Rely

The points upon which the City of Milwaukee intends to rely in prosecution of its petition for review of the aforesaid order of said Commission are those stated in its joint application and petition for rehearing timely filed with said Commission, which will be part of the record and which will be certified and filed with this Court, as is provided for by the Natural Gas Act, and which application and petition for rehearing is incorporated into this petition by reference with the same force and effect as though physically and specifically included herein. A concise statement of the conclusions of said Commission in paragraphs (1), (2), and (3), page 69, Opinion No. 217, is as follows:

"(1) Phillips Petroleum Company is engaged in the 'production and gathering' of natural gas within the meaning of Section 1(b) of the Natural Gas Act.

"(2) Phillips' movement of gas in interstate commerce and its sales thereof for resale in interstate commerce, together with its processing operations, all constitute a part of its gathering business, so that such movement, processing, and sales come within the exemption of production and gathering in Section 1(b) of the Act.

"(3) Phillips Petroleum Company is not a 'natural-gas company' within the meaning of Sections 1(b) or 2(6) of the Natural Gas Act."

The Federal Power Commission has erred in making each of the statements or conclusions contained in paragraphs numbered (2) and (3), page 69 of Opinion No. 217, afore set out. The statements or conclusions in said paragraph numbered (1) afore set out, page 69 of Opinion No. 217, are erroneous, if it is intended in any way to imply that *all* of the activities of Phillips Petroleum Company fall in the category of "production or gathering" within the meaning of Section 1(b) of the Natural Gas Act.

The errors in the statements or conclusions afore set out and contained in said paragraphs (1), (2), and (3), page 69 of Opinion No. 217, are as follows:

(a) In concluding that the movement of natural gas in interstate commerce by Phillips Petroleum Company, its sales thereof for resale in interstate commerce, together with its processing operations "all constitute part of its gathering business or they are incidents of or activities related to such business, so that such movement, processing, and sales come within the exception of processing and gathering in section 1(b) of the Act."

(b) In concluding that the movement of natural gas in interstate commerce by Phillips Petroleum Company is part of the "gathering business" or an incident or activity related thereto.

(c) In concluding that the sale of natural gas by Phillips Petroleum Company to pipeline companies such as Michigan-Wisconsin Pipe Line Company and Cities Service

BLEED THROUGH

Gas Company and other pipeline companies mentioned in said Opinion, for purpose of resale, are part of the "gathering business" or an incident or activity related thereto.

(d) In concluding that the processing operations of Phillips Petroleum Company prior to the delivery and sale of natural gas to said pipeline companies is part of the "gathering business" or an incident or activity related thereto.

(e) In concluding that said movement, sales for resale and/or processing, either singly or together, come within the exception of production or gathering in Section 1(b) of the Natural Gas Act.

(f) In concluding that Phillips Petroleum Company is not a "natural-gas company" within the meaning of Section 1(b) or 2(6) of the Natural Gas Act.

The basis for and reasons relied on in support of the foregoing specifications of error are as follows:

1. That the aforesaid statements and conclusions of said Commission are contrary to law.

2. That the determination that "sales" are part of production or gathering is contrary to the evidence.

3. That the determination that jurisdiction over sales will interfere with state regulatory efforts is contrary to law.

4. That the determination that said Commission's jurisdiction will interfere with state regulation is contrary to evidence.

5. That the Commission erred as a matter of law in making an order terminating the proceedings.

6. That the provisions of the Natural Gas Act vest jurisdiction in said Commission.

That the foregoing represent the principal points upon which your petitioner urges and seeks relief so that the orders of the said commission previously referred to be reversed; that citations are omitted and subsidiary points and arguments relied upon are not included so as not to constitute this petition a brief, instead of a petition.

WHEREFORE, your petitioner prays that the Court review the complained of orders of the said Commission in the latter's Docket No. G--1148, and that the Court set aside such orders in their entirety.

Dated at Milwaukee, Wisconsin, this 8th day of November, 1951.

CITY OF MILWAUKEE,
a municipal corporation

By WALTER J. MATTISON
WALTER J. MATTISON,
City Attorney

HARRY G. SLATER,
First Assistant City Attorney

Attorneys for Petitioner
City of Milwaukee

801 City Hall
Milwaukee 2, Wisconsin

CHARLES S. RHYNE
National Institute of
Municipal Law Officers
730 Jackson Place, N. W.
Washington 6, D. C.

BLEED THROUGH

STATE OF WISCONSIN }
MILWAUKEE COUNTY } SS.

WALTER J. MATTISON, being first duly sworn, on oath deposes and says that he is an officer of the above named petitioner, City of Milwaukee, to-wit: its City Attorney, and makes this verification on its behalf, being thereunto duly authorized; that he has read the foregoing petition of the City of Milwaukee to review an order of the Federal Power Commission in its Docket No. G-1148, knows the contents thereof, and that the same is true of his own knowledge except as to matters therein stated on information and belief, and as to those matters he believes it to be true; that the source of his knowledge and the grounds of his belief are information obtained by affiant and statements made to him by servants and agents of said corporation, all in the regular course of their respective duties, and records on file in the above entitled proceedings. Affiant says further that the reason why this verification is not made by the City of Milwaukee is that said City is a municipal corporation.

WALTER J. MATTISON

Subscribed and sworn to before me
this 8th day of November, 1951.

ELSIE W. SUTSCHEK
Notary Public, Milwaukee County, Wis.
My commission expires Dec. 30-1951

(NOTARIAL SEAL)

PETITION OF CITY OF KANSAS CITY, MISSOURI, FOR REVIEW OF ORDER OF FEDERAL POWER COMMISSION

11,242

To the Honorable, the United States Court of Appeals for the District of Columbia Circuit, and to the Judges thereof:

The City of Kansas City, Missouri, hereinafter called the petitioner, believing itself adversely affected and aggrieved by the final Order of the Federal Power Commission, hereinafter referred to as "Respondent" or "Respondent Commission", issued August 22, 1951, entered in that certain cause bearing Docket No. G-1148, entitled: "In the Matter of Phillips Petroleum Company", then pending before said Respondent, respectfully petitions this Honorable Court to review and set aside such Order, and in support of its Petition, states:

I.

Petitioner is a municipal corporation duly organized and existing under the Laws of the State of Missouri, and is a "municipality" as defined by Section 2(3) of the Natural Gas Act (15 U. S. C. A., Sections 717, *et seq.*).

II.

Respondent is an administrative and regulatory body created by statute, derives its authority and jurisdiction herein under an Act of Congress known as the "Natural

BLEED THROUGH

Gas Act" (15 U. S. C. A., Sections 717, *et seq.*), and has its principal office and place of business in the City of Washington, District of Columbia.

III.

Phillips Petroleum Company, hereinafter referred to as "Phillips", is a Delaware corporation, with its principal office and place of business in Bartlesville, Oklahoma, and is the "natural-gas company" to which the Order relates that Respondent sought to be reviewed.

IV.

On October 28, 1948, Respondent ordered an investigation to determine whether Phillips is a "natural-gas company", as that term is defined by Sections 1(b) and 2(6) of the Natural Gas Act, and, if so, whether any of its rates, subject to the Respondent's jurisdiction are unjust or unreasonable. Petitioner intervened in such proceeding and showed that in 1950 Phillips sold in interstate commerce to Cities Service Gas Company, a "natural-gas company", for resale by it, more than 30 billion cubic feet of natural gas, and delivered such gas to Cities Service Gas Company in the State of Oklahoma. Some of this gas was sold and delivered to Petitioner and its inhabitants through the pipe lines of Cities Service Gas Company and the distribution system of The Gas Service Company, a local gas distributing company. The inhabitants of Petitioner also bought certain amounts of natural gas from Central West Utility Company, another local gas distributing company, which

purchased such gas from Panhandle Eastern Pipe Line Company, a "natural-gas company", which in turn purchased in interstate commerce for resale and received large quantities of gas from Phillips in the States of Texas and Oklahoma.

In 1950, Phillips admittedly transported natural gas in interstate commerce and sold such gas to five "natural-gas companies" in interstate commerce for resale by such companies, including said Cities Service Gas Company and Panhandle Eastern Pipe Line Company.

Hearings before an Examiner of the Respondent were begun in Bartlesville, Oklahoma, on April 3, 1951, and concluded on May 23, 1951. The staff of Respondent alleged and were prepared to show that Phillips' rates for natural gas were excessive by several million dollars per year. By Respondent's Order of April 16, 1951, however, the Examiner was directed to confine the hearing to a determination of the first issue hereinbefore mentioned, namely, whether Phillips is a "natural-gas company", and that a further hearing relative to the remaining issues be held at a later date to be fixed by Respondent.

The transcript covers approximately 6000 pages, and 196 exhibits were received in evidence covering many additional thousands of pages.

Following the granting of an unopposed request by the Respondent's staff for omission of intermediate decision procedure, the entire Respondent Commission hear oral argument of the single issue, to-wit, whether Phillips is a "natural-gas company", for two days, July 9 and 10, 1951.

BLEED THROUGH

V.

As of August 22, 1951, Respondent found that Phillips is not a "natural-gas company", as defined by the Natural Gas Act, as more specifically set out in this Petition. A true copy of Respondent's Opinion and Order entered as of said August 22, 1951, marked "Exhibit A", is attached hereto and by reference made a part hereof. In the event Phillips is found by this Court to be a "natural-gas company", as defined by Sections 1(b) and 2(6) of the Natural Gas Act, Respondent will have jurisdiction to fix the maximum selling price which Phillips may charge for natural gas sold to the aforesaid interstate pipeline companies that sell and deliver such gas to the named distributing companies for resale to Petitioner and its inhabitants. The price of natural gas charged by Phillips to Cities Service Gas Company and to Panhandle Eastern Pipe Line Company is not now fixed by any regulatory authority.

Petitioner states that the Congress intended to protect the ultimate consumer of natural gas when it enacted the Natural Gas Act, but there is no such protection for the ultimate consumers of natural gas, such as Petitioner and its citizens, in the City of Kansas City, Missouri, if the price of gas sold by Phillips remains unregulated. Moreover, every cent paid for natural gas sold by Phillips to the aforesaid pipeline companies is reflected and passed on in the prices for gas charged the ultimate consumers thereof.

Hence, Petitioner is adversely affected and aggrieved by the aforesaid final Order of Respondent and is a proper party to petition this Court for review of the Respondent's Order under the provisions of Section 19(b) of the Natural

Gas Act, and Section 1009 of the Administrative Procedure Act (5 U. S. C. A., Sections 1001, *et seq.*).

VI.

As of August 22, 1951, Respondent made and entered its Order which contained concluding findings, reading as follows:

(1) Phillips Petroleum Company is engaged in the "production and gathering" of natural gas within the meaning of Section 1(b) of the Natural Gas Act.

(2) Phillips' movement of gas in interstate commerce and its sales thereof for resale in interstate commerce, together with its processing operations, all constitute a part of its gathering business, or they are incidents of or activities related to such business, so that such movement, processing, and sales come within the exemption of production and gathering in Section 1(b) of the Act.

(3) Phillips Petroleum Company is not a "natural-gas company" within the meaning of Sections 1(b) or 2(6) of the Natural Gas Act.

Respondent also entered the following Order:

> That the proceeding initiated by the Commission's order of October 28, 1948, in Docket No. G-1148 be, and the same hereby is, terminated.

Chairman Wallgreen and Commissioners Smith and Wimberly concurred in the findings and Order, Commissioner Draper concurred in the result and filed a short concurring opinion, and Commissioner Buchanan filed a lengthy dissenting opinion.

BLEED THROUGH

VII.

On September 10, 1951, in form and manner and within the time prescribed by the applicable rules and regulations of the Commission, and Section 19(a) of the Natural Gas Act, Petitioner filed with Respondent its "Petition of Intervener Kansas City for Rehearing, Reconsideration and Vacation of the Opinion and Order of the Commission Herein, Issued August 22, 1951."

Thereafter, similar applications for rehearing of Respondent's Opinion and Order issued August 22, 1951, were filed by other interveners, as follows: By the City of Milwaukee, Wisconsin, on September 12, 1951; by the State of Wisconsin and Public Service Commission of Wisconsin on September 17, 1951; and by the City of Detroit, Michigan, and Wayne County, Michigan, on September 19, 1951; that thereafter on September 28, 1951, Petitioner's said Petition for Rehearing of said Order of August 22, 1951, was denied, and all of the said applications for rehearing of the other interveners were likewise denied by Respondent; that thereby and thereafter the said Order of Respondent of August 22, 1951, became fixed and is now a final order and judgment of said Respondent; that Petitioner is adversely affected and aggrieved thereby, for the reasons herein stated; and that Petitioner has exhausted its remedies before said Respondent and, therefore, now seeks review of said final Order and judgment of said Respondent Commission, all in form and manner as permitted and prescribed by Section 19 of the Natural Gas Act.

VIII.

The jurisdiction and authority of this Court is invoked under Section 19(b) of the Natural Gas Act aforesaid.

IX.

SPECIFICATIONS OF ERRORS

Respondent Commission, in its said findings and Order, committed errors in the following particulars, upon each of which Petitioner intends to reply:

1. The Commission erred as a matter of law by ordering the above proceeding to be terminated, because there is substantial evidence on the record that Phillips Petroleum Company (Phillips) is a "natural-gas company" as defined by the Natural Gas Act and, therefore, the Commission does in fact and in law have jurisdiction of Phillips in this proceeding.

2. The Commission erred in failing to find that Phillips is a "natural-gas company" as defined by the Natural Gas Act and as such is subject to the jurisdiction of the Commission under such Natural Gas Act, because the record shows and Phillips admits on the record that it is engaged in the transportation of natural gas in interstate commerce and also in the sale in interstate commerce of such gas for resale, and, therefore, Phillips is in fact and in law a "natural-gas company" and subject to the jurisdiction of the Commission.

3. The Commission erred in its formal Finding No. (1) that Phillips is engaged in the "production and gathering"

BLEED THROUGH

of natural gas within the meaning of Section 1(b) of the Natural Gas Act, indicating thereby that Phillips is exempt from the provisions of the Natural Gas Act, whereas the record shows that Phillips' operations are not confined to the "production and gathering" of natural gas but Phillips is engaged in the transportation of natural gas in interstate commerce and in the sale in interstate commerce of such gas for resale.

4. The Commission erred in its formal Finding No. (2) that Phillips' movement of gas in interstate commerce and its sales thereof for resale in interstate commerce, together with its processing operations, all constitute a part of its "gathering" business, or they are incidents of or activities related to such business, so that such movement, processing, and sales come within the exemption of "production and gathering" in Section 1(b) of the Natural Gas Act, because such finding is contrary to and not supported by substantial evidence on the record and is contrary to the law appertaining thereto.

5. The Commission erred in its formal Finding No. (3) that Phillips is not a "natural-gas company" within the meaning of Sections 1(b) or 2(6) of the Natural Gas Act because such finding is not supported by substantial evidence on the record and is contrary to the law appertaining thereto.

6. The Commission erred in its conclusion that the background and legislative history of the Natural Gas Act did not encompass the activities of companies whose operations are confined to "production and gathering", including the movement and sale of gas as a part of that business, and that Phillips was such a company, because such a con-

clusion is contrary to fact and in violation of the express terms of the Natural Gas Act.

7. The Commission erred in its finding that Phillips' operations, so far as relevant, consist of "production and gathering", or they are incidents of or activities related to these functions, thus requiring their inclusion within the exemption of the Natural Gas Act, because such finding is not supported by substantial evidence on the record and is contrary to law.

8. The Commission erred in its finding that Phillips' processing at its various plants and the movement of gas by Phillips to these plants constitute "gathering" within the meaning of Section 1(b) of the Natural Gas Act, because such finding is not supported by substantial evidence on the record and is contrary to law.

9. The Commission erred in its conclusion that the movement of gas through each of the Phillips' processing plants is a part of Phillips' "gathering" business or is at least exempt as an incident of or an activity related to its "gathering" process, because such conclusion is not supported by substantial evidence on the record and is contrary to law.

10. The Commission erred in holding that the movement of gas through certain large diameter pipe lines leading to Phillips' processing plants is exempt from the provisions of the Natural Gas Act on the ground that such lines leading to such plants served the function of "gathering" and that the movement of gas through these lines and the lines themselves are exempt under the Natural Gas Act, because such conclusions are not supported by substantial evidence on the record and are contrary to law.

BLEED THROUGH

11. The Commission erred in its finding that the sales of gas made a short distance after the gas moves through Phillips' processing plants are the end product of "production and gathering" and are a part of Phillips' "gathering" business, or at least an exempt incident thereof, because such finding is not supported by substantial evidence on the record and is contrary to law.

12. The Commission erred in its finding that such sales of natural gas are so closely connected with the local incidents of the process of "production and gathering" as to render rate regulation by the Commission inconsistent or a substantial interference with the exercise by the affected states of their regulatory functions, because such finding is not supported by substantial evidence on the record and is contrary to law.

13. The Commission erred in its finding that the Commission's regulation of sales made by Phillips in the process of "production and gathering" of natural gas would, by its very nature, be inconsistent or constitute a substantial interference with such regulation of producers and gatherers by the States of Oklahoma, Texas and New Mexico, because such finding is not supported by substantial evidence on the record and is contrary to law.

14. The Commission erred in failing to find that Phillips' sales of gas to the five interstate pipe lines, to-wit: Panhandle Eastern Pipe Line Company, Michigan-Wisconsin Pipe Line Company, Independent Natural Gas Company, El Paso Natural Gas Company and Cities Service Gas Company, were made after the completion of "production and gathering", because there was substantial evidence on the record to support such a finding, and under

the provisions of the Natural Gas Act such finding should have been made.

15. The Commission erred in failing to find that sales of gas made by Phillips to the aforesaid five interstate pipe lines did not and never had created a conflict of interference with the exercise by the affected states of their regulatory functions, because there was substantial evidence on the record to support such a finding, and under the provisions of the Natural Gas Act such a finding should have been made.

16. The Commission erred in its finding that the fixing of maximum rates for the sales of natural gas made by a producer thereof under the Natural Gas Act would run counter to state conservation efforts, through the fixing of minimum well-head prices or otherwise, to insure maximum recovery of gas prior to abandonment of the well, because such finding is not supported by substantial evidence on the record and is contrary to law.

17. The Commission erred in directing its Trial Examiner by its order of April 6, 1951, to exclude all evidence to determine whether any of Phillips' rates, subject to the Commission's jurisdiction, are unjust or unreasonable, and further erred in approving the exclusion of substantial evidence offered by the staff of the Commission at such hearing showing that Phillips' rates are in fact unjust and unreasonable, because such action of the Commission was arbitrary and capricious, contrary to law and in violation of the express terms of the Natural Gas Act.

BLEED THROUGH

X.

Respondent also erred in overruling and denying said "Petition of Intervener Kansas City for Rehearing, Reconsideration and Vacation of the Opinion and Order of the Commission Herein, Issued August 22, 1951."

WHEREFORE, Petitioner respectfully prays:

(1) That upon the filing hereof, the Clerk of this Court serve copy of this petition upon the Honorable Thomas C. Buchanan, Acting Chairman of the Respondent Federal Power Commission, and command said Commission, within forty (40) days from the date thereof, to certify and file with this Court transcript of the record upon which the Order complained of was entered, including all pleadings, orders, transcript of testimony, exhibits, findings, conclusions and Order of the Commission of date August 22, 1951, Petitioner's petition for rehearing, and Order denying said petition for rehearing, all in form and manner prescribed by law.

(2) That on final hearing and determination hereof, the said findings, conclusions and Order of said Respondent Commission of date August 22, 1951, be in all things set aside, reversed and held for naught; and that respondent Phillips Petroleum Company be held by this Court to be a "natural-gas company" within the meaning of the aforesaid Natural Gas Act, and, therefore, subject to the jurisdiction of Respondent Commission.

(3) For such other and further relief as shall appear to be just and equitable in the premises.

/s/ DAVID M. PROCTOR
David M. Proctor
City Counselor

/s/ JEROME M. JOFFEE
Jerome M. Joffee
Special Utilities and
Legislative Counsel

Attorneys for City of
Kansas City, Missouri,
Petitioner.

AFFIDAVIT

STATE OF MISSOURI }
COUNTY OF JACKSON } SS

Jerome M. Joffee, of lawful age, being first duly sworn, upon his oath states that he is Special Utilities and Legislative Counsel for Petitioner City of Kansas City, Missouri, and as such is duly authorized to and makes this affidavit for and on its behalf; that he has read the within and foregoing Petition for Review and that the facts set out therein are true, according to the best of his knowledge, information and belief.

/s/ JEROME M. JOFFEE

Subscribed and sworn to before me this 8th day of November, 1951.

/s/ MAURICE E. BENSON
Notary Public within
and for Jackson County,
Missouri

My commission expires February 4, 1955.

BLEED THROUGH

PETITION OF THE CITY OF DETROIT, MICHIGAN, FOR REVIEW OF ORDER OF FEDERAL POWER COMMISSION

11,241

To the Honorable, the United States Court of Appeals for the District of Columbia Circuit, and to the Judges thereof:

The City of Detroit, a municipal corporation of the State of Michigan, hereinafter called the "Petitioner," believing itself adversely affected and aggrieved by the final Order of the Federal Power Commission, hereinafter called the "Respondent," issued August 22, 1951, entered in that certain cause bearing Docket No. G-1148, entitled: "In the Matter of Phillips Petroleum Company," then pending before Respondent, respectfully petitions this Honorable Court to review and set aside such Order, and in support of its Petition, states:

I

Petitioner is a municipal corporation duly organized and existing under the Laws of the State of Michigan, and is a "municipality" as defined by Section 2(3) of the Natural Gas Act (15 U. S. C. A., Sections 717, *et seq.*).

II

Respondent is an administrative and regulatory body created by statute, derives its authority and jurisdiction herein under an Act of Congress known as the "Natural Gas Act" (15 U. S. C. A., Sections 717, *et seq.*), and has its

principal office and place of business in the City of Washington, District of Columbia.

III

Phillips Petroleum Company, hereinafter referred to as "Phillips", is a Delaware corporation, with its principal office and place of business in Bartlesville, Oklahoma, and is the "natural-gas company" to which the Order relates that Respondent sought to be reviewed.

IV

On October 28, 1948, Respondent ordered an investigation to determine whether Phillips is a "natural gas company," as that term is defined by sections 1(b) and 2(6) of the Natural Gas Act, and, if so, whether any of its rates, subject to the Respondent's jurisdiction are unjust and unreasonable. Petitioner intervened in such proceeding and showed that in 1950 Phillips sold in interstate commerce to Michigan-Wisconsin Pipe Line Company, a "natural gas company," for resale by it, more than several million cubic feet of natural gas, and delivered such gas to Michigan-Wisconsin Pipeline Company in the State of Oklahoma. Some of this gas was sold and delivered to Petitioner and its inhabitants through the pipe lines of Michigan-Wisconsin Pipe Line Company and the distribution system of the Michigan Consolidated Gas Company, a local gas distributing company. The inhabitants of Petitioner also bought certain amounts of natural gas from Michigan Consolidated Gas Company, which purchased such gas from Panhandle

BLEED THROUGH

Eastern Pipe Line Company, a "natural gas company", which in turn purchased in interstate commerce for resale and received large quantities of gas from Phillips in the States of Texas and Oklahoma.

In 1950, Phillips admittedly transported natural gas in interstate commerce and sold such gas to five "natural gas companies" in interstate commerce for resale by such companies, including said Michigan - Wisconsin Pipeline Company and Panhandle Eastern Pipe Line Company.

Hearings before an Examiner of the Respondent were begun in Bartlesville, Oklahoma, on April 3, 1951, and concluded on May 23, 1951. The staff of Respondent alleged and were prepared to show that Phillips' rates for natural gas were excessive by several million dollars per year. By Respondent's Order of April 16, 1951, however, the Examiner was directed to confine the hearing to a determination of the first issue hereinbefore mentioned, namely, whether Phillips is a "natural gas company," and that a further hearing relative to the remaining issues be held at a later date to be fixed by Respondent.

The transcript covers approximately 6000 pages, and 196 exhibits were received in evidence covering many additional thousands of pages.

Following the granting of a request by the Respondent's staff for omission of intermediate decision procedure (Counsel for this Petitioner not having participated in favor of such request; not having consented to such request nor condoned the same), the entire Respondent Commission heard oral argument of the single issue, to-wit, whether Phillips is a "natural gas company," for two days, July 9 and 10, 1951.

V

As of August 22, 1951, Respondent found that Phillips is not a "natural gas company," as defined by the Natural Gas Act, as more specifically set out in this Petition. A true copy of Respondent's Petition and Order entered as of said August 22, 1951, Marked "Exhibit A", is attached hereto and by reference made a part hereof. In the event Phillips is found by this Court to be a "natural gas company," as defined by Sections 1(b) and 2(6) of the Natural Gas Act, Respondent will have jurisdiction to fix the maximum selling price which Phillips may charge for natural gas sold to the aforesaid interstate pipeline companies that sell and deliver such gas to the named distributing company for resale to Petitioner and its inhabitants. The price of natural gas charged by Phillips to Michigan Consolidated Gas Company and to Panhandle Eastern Pipe Line Company is not now fixed by any regulatory authority.

Petitioner states that the Congress intended to protect the ultimate consumer of natural gas when it enacted the Natural Gas Act, but there is no such protection for the ultimate consumers of natural gas, such as Petitioner and its citizens, in the City of Detroit, Michigan, if the price of gas sold by Phillips remains unregulated. Moreover, every cent paid for natural gas sold by Phillips to the aforesaid pipe line companies is reflected and passed on in the prices for gas charged the ultimate consumers thereof.

Hence, Petitioner is adversely affected and aggrieved by the aforesaid final Order of Respondent and is a proper party to petition this Court for review of the Respondent's Order under the provisions of Section 19(b) of the Natural

BLEED THROUGH

Gas Act, and Section 1009 of the Administrative Procedure Act (5 U. S. C. A., Sections 1001, *et seq.*).

VI

As of August 22, 1951, Respondent made and entered its Order which contained concluding findings reading as follows:

(1) Phillips Petroleum Company is engaged in the "production and gathering" of natural gas within the meaning of Section 1(b) of the Natural Gas Act.

(2) Phillips' movement of gas in interstate commerce and its sale thereof for re-sale in interstate commerce, together with its processing operations, all constitute a part of its gathering business, or they are incidents of or activities related to such business, so that such movement, processing, and sales come within the exemption of production and gathering in Section 1(b) of the Act.

(3) Phillips Petroleum Company is not a "natural gas company" within the meaning of Sections 1(b) or 2(6) of the Natural Gas Act.

Respondent also entered the following Order:

That the proceedings initiated by the Commission's Order of October 28, 1948, in Docket No. G-1148, be and the same is, terminated.

Chairman Wallgren and Commissioners Smith and Wimberly concurred in the findings and Order, Commis-

sioner Draper concurred in the result and filed a short concurring opinion, and Commissioner Buchanan filed a lengthy dissenting opinion.

VII

On September 18, 1951, in form and manner and within the time prescribed by the applicable rules and regulations of the Commission, and Section 19(a) of the Natural Gas Act, Petitioner filed with Respondent its "Petition of Intervenor City of Detroit for Rehearing, Reconsideration and Vacation of the Opinion and Order of the Commission Herein, Issued August 22, 1951."

Similar applications for rehearing of Respondent's Opinion and Order issued August 22, 1951, were filed by other intervenors, as follows: By the City of Milwaukee, Wisconsin, on September 12, 1951; by the State of Wisconsin and Public Service Commission of Wisconsin on September 17, 1951; and by the City of Kansas City, Missouri, on September 19, 1951, and Wayne County, Michigan, on September 19, 1951; that thereafter on September 28, 1951, Petitioner's said Petition for Rehearing of said Order of August 22, 1951, was denied, and all of the said applications for rehearing of the other intervenors were likewise denied by Respondent; that thereby and thereafter the said Order of Respondent of August 22, 1951, became fixed and is now a final Order and judgment of said Respondent; that Petitioner is adversely affected and aggrieved thereby, for the reasons herein stated; and that Petitioner has exhausted its remedies before said Respondent, and, therefore, now seeks review of said final Order and Judgment of said

BLEED THROUGH

Respondent Commission, all in form and manner as permitted and prescribed by Section 19 of the Natural Gas Act.

VIII

The jurisdiction and authority of this Court is invoked under Section 19(b) of the Natural Gas Act aforesaid.

IX

SPECIFICATION OF ERRORS

Respondent Commission, in its said findings and Order, committed errors in the following particulars, upon each of which Petitioner intends to rely:

1. The Commission erred as a matter of law by ordering the above proceeding to be terminated, because there is substantial evidence on the record that Phillips Petroleum Company (Phillips) is a "natural gas company" as defined by the Natural Gas Act, and, therefore, the Commission does in fact and in law have jurisdiction of Phillips in this proceeding.

2. The Commission erred in failing to find that Phillips is a "natural gas company" as defined by the Natural Gas Act and as such is subject to the jurisdiction of the Commission under such Natural Gas Act, because the record shows and Phillips admits on the record that it is engaged in the transportation of natural gas in interstate Commerce and also in the sale in interstate commerce of

such gas for resale, and, therefore, Phillips is in fact and in law a "natural gas company" and subject to the jurisdiction of the Commission.

3. The Commission erred in its formal Finding No. (1) that Phillips is engaged in the "production and gathering" of natural gas within the meaning of Section 1(b) of the Natural Gas Act, indicating thereby that Phillips is exempt from the provisions of the Natural Gas Act, whereas the record shows that Phillips' operations are not confined to the "production and gathering" of natural gas but Phillips is engaged in the transportation of natural gas in interstate commerce and in the sale in interstate commerce of such gas for resale.

4. The Commission erred in its formal Finding No. (2) that Phillips' movement of gas in interstate commerce, and its sales thereof for resale in interstate commerce, together with its "gathering" business, or they are incidents of or activities related to such business, so that such movement, processing, and sales come within the exemption of "production and gathering" in Section 1(b) of the Natural Gas Act, because such finding is contrary to and not supported by substantial evidence on the record and is contrary to the law appertaining thereto.

5. The Commission erred in its formal Finding No. (3) that Phillips is not a "natural gas company" within the meaning of Sections 1(b) or 2(6) of the Natural Gas Act because such finding is not supported by substantial evidence on the record and is contrary to the law appertaining thereto.

6. The Commission erred in its conclusions that the background and legislative history of the Natural Gas Act

BLEED THROUGH

did not encompass the activities of companies whose operations are confined to "production and gathering", including the movement and sale of gas as a part of that business, and that Phillips was such a company, because such a conclusion is contrary to fact and in violation of the express terms of the Natural Gas Act.

7. The Commission erred in its finding that Phillips' operations, so far as relevant, consist of "production and gathering", or they are incidents of or activities related to these functions, thus requiring their inclusion within the exemption of the Natural Gas Act, because such finding is not supported by substantial evidence on the record and is contrary to law.

8. The Commission erred in its finding that Phillips' processing at its various plants and the movement of gas by Phillips to these plants constitute "gathering" within the meaning of Section 1(b) of the Natural Gas Act, because such finding is not supported by substantial evidence on the record and is contrary to law.

9. The Commission erred in its conclusion that the movement of gas through each of the Phillips' processing plants is a part of Phillips' "gathering" business or is at least exempt as an incident of or an activity related to its "gathering" process, because such conclusion is not supported by substantial evidence on the record and is contrary to law.

10. The Commission erred in holding that the moving of gas through certain large diameter pipe lines leading to Phillips' processing plants is exempt from the provisions of the Natural Gas Act on the ground that such lines leading

to such plants served the function of "gathering" and that the movement of gas through these lines and the lines themselves are exempt under the Natural Gas Act, because such conclusions are not supported by substantial evidence on the record and are contrary to law.

11. The Commission erred in its finding that the sales of gas made a short distance after the gas moves through Phillips' processing plants are the end product of "production and gathering" and are a part of Phillips' "gathering" business, or at least an exempt incident thereof, because such finding is not supported by substantial evidence on the record and is contrary to law.

12. The Commission erred in its finding that such sales of natural gas are so closely connected with the local incidents of the process of "production and gathering" as to render rate regulation by the Commission inconsistent or a substantial interference with the exercise by the affected states of their regulatory functions, because such finding is not supported by substantial evidence on the record and is contrary to law.

13. The Commission erred in its finding that the Commission's regulation of sales made by Phillips in the process of "production and gathering" of natural gas would, by its very nature, be inconsistent or constitute a substantial interference with such regulation of producers and gatherers by the States of Oklahoma, Texas and New Mexico, because such finding is not supported by substantial evidence on the record and is contrary to law.

14. The Commission erred in failing to find that Phillips' sales of gas to the five interstate pipe lines, to-

BLEED THROUGH

wit: Panhandle Eastern Pipe Line Company, Michigan-Wisconsin Pipe Line Company, Independent Natural Gas Company, El Paso Natural Gas Company and Cities Service Gas Company, were made after the completion of "production and gathering", because there was substantial evidence on the record to support such a finding, and under the provisions of the Natural Gas Act such finding should have been made.

15. The Commission erred in failing to find that sales of gas made by Phillips to the aforesaid five interstate pipe lines did not and never had created a conflict of interference with the exercise by the affected states of their regulatory functions, because there was substantial evidence on the record to support such a finding, and under such provisions of the Natural Gas Act such a finding should have been made.

16. The Commision erred in its finding that the fixing of maximum rates for the sales of natural gas made by a producer thereof under the Natural Gas Act would run counter to state conservation efforts, through the fixing of minimum well-head prices or otherwise, to insure maximum recovery of gas prior to abandonment of the well, because such finding is not supported by substantial evidence on the record and is contrary to law.

17. The Commission erred in directing its Trial Examiner by its order of April 6, 1951, to exclude all evidence to determine whether any of Phillips' rates, subject to the Commission's jurisdiction, are unjust or unreasonable, and further erred in approving the exclusion of substantial evidence offered by the staff of the Commission at such hearing showing that Phillips' rates are in fact unjust and

unreasonable, because such action of the Commission was arbitrary and capricious, contrary to law and in violation of the express terms of the Natural Gas Act.

18. The Commission erred by invoking a procedural device termed "Omission of Intermediate Decision" and therefore deprived the Petitioner of a full and fair hearing, contrary to law and the provisions of the Natural Gas Act and the Administrative Procedure Act in such cases made and provided.

The Commission designated Edward B. Marsh as the Trial Examiner, who, for a period of 39 days, conducted the hearing at Bartlesville, Oklahoma. He was not accompanied by any member or members of the Commission, so that he was the sole trier of the issues in the case. (In effect he was the Federal Power Commission in the matter. (Section 15 Natural Gas Act)). On July 27, 1951, four of the five members of the Commission, by some sort of vote, caused to be issued a "Release" announcing did not follow any Findings of Fact; rather it preceded the determination of fact and as of date August 15, 1951, no findings had been made or filed by the Commission (see Opinion No. 217 dated August 16, 1951). The major issue c the case is whether Phillips is a "natural gas company" within the provisions of the Natural Gas Act. This question is to be resolved in the light of facts and these facts, in turn, are determinable upon the testimony of witnesses who appeared before the Trial Examiner and testified. In this case the Trial Examiner did not make any Findings of Fact. He was relieved of that task and duty by an Order of the Commission which, ~~in effect~~, is the process by which the Commission usurps the jurisdiction of the Trial Examiner to decide

BLEED THROUGH

the facts from the evidence adduced at the trial, hearing or investigation.

The Findings of Fact, Conclusions of Law, and the Order contained in and made a part of Opinion No. 217, aforesaid, were promulgated by the majority of the Commission in an arbitrary and capricious manner, beyond the scope of their authority and contrary to the principles of law and the Constitution of the United States, in that "due process of law" was not followed and administered by the Commission in the course of the conduct of the hearing and investigation affecting said matter, and the Petitioner has been deprived thereby of its statutory right to a full and fair hearing. Section 14 of the Natural Gas Act is the statutory authority for the conduct of investigations (52 Stat. 828 (1938); 15 U. S. C. 717-n is the authority for hearings. As a Trial Examiner was designated, as provided by Section 15(a), it must be presumed that the proceeding thus conducted was a "hearing" which, as a matter of law, required that "the one who decides must hear" (Morgan v. United States, 298 U. S. 468). Contrary to the laws of the United States, the Commission, without power so to do, removed the matter from the hands of the Trial Examiner, who had been designated by it; and thereafter undertook to hear arguments of counsel, to make an alleged Finding of Fact, and Conclusions of Law thereon. The Natural Gas Act does not prescribe such a procedure and no power is delegated to the Commission to assume such legislative authority as to enable it to do so.

By reason of the method used by this Commission to decide that it did not have jurisdiction of Phillips, the Findings of Fact upon the evidence, by the Trial Examiner,

(who heard the testimony, and by virtue thereof, was the only competent person to make such a finding from the mass of conflicting testimony adduced before him) was dispensed with by the Commission by invoking a procedural device termed "Omission of Intermediate Decision", thereby depriving Petitioner of a full and fair hearing.

X

Respondent also erred in overruling and denying said "Petition of Intervenor City of Detroit for Rehearing, Reconsideration and Vacation of the Opinion and Order of the Commission herein, issued August 22, 1951."

CONCLUSION

WHEREFORE, Petitioner respectfully prays:

(1) That upon the filing hereof, the Clerk of this Court serve copy of this petition upon the Honorable Thomas C. Buchanan, Acting Chairman of the Respondent Federal Power Commission, and command said Commission, within forty (40) days from the date thereof, to certify and file with this Court transcript of the record upon which the Order complained of was entered, including all pleadings, orders, transcript of testimony, exhibits, findings, conclusions and Order of the Commission of date August 22, 1951, Petitioner's petition for rehearing, and Order denying said petition for rehearing, all in form and manner prescribed by law.

(2) That on final hearing and determination hereof, the said findings, conclusions and Order of said Respondent

BLEED THROUGH

Commission of date August 22, 1951, be in all things set aside, reversed and held for naught; and that respondent Phillips Petroleum Company be held by this Court to be a "natural gas company" within the meaning of the aforesaid Natural Gas Act, and, therefore, subject to the jurisdiction of Respondent Commission.

(3) For such other and further relief as shall appear to be just and equitable in the premises.

CITY OF DETROIT
A municipal corporation of the
State of Michigan,
Petitioner,

Attorneys for said
Petitioner
301 City Hall
Detroit 26, Michigan
Telephone: WOodward 3-9640

(signed) PAUL T. DWYER,
Paul T. Dwyer
Acting Corporation Counsel

(signed) JAMES H. LEE,
James H. Lee
Assistant Corporation Counsel

AFFIDAVIT

STATE OF MICHIGAN }
COUNTY OF WAYNE } SS.

JAMES H. LEE of the City of Detroit, Wayne County, Michigan, being duly sworn, deposes and says that he is an Assistant Corporation Counsel of the City of Detroit, a

municipal corporation of the State of Michigan, and as such is attorney for the City of Detroit, Michigan, a municipal corporation of the State of Michigan, petitioner herein; that he is authorized to sign the foregoing petition for and and behalf of said petitioner and that he did so sign same; that he knows the contents thereof and that the same is true of his own knowledge except as to those matters therein stated to be upon information and belief, and as to those matters, he believes it to be true.

Further dependent saith not.

JAMES H. LEE
James H. Lee
Assistant Corporation Counsel

Subscribed and sworn to before me
This 12th day of November, A. D.
1951.

GORDON N. McKEE

Notary Public, Wayne County, Michigan (SEAL)
My commission expires March 23, 1954.

UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

MOTION OF PHILLIPS PETROLEUM COMPANY FOR LEAVE TO INTERVENE

Phillips Petroleum Company (hereinafter referred to as "Phillips") respectfully moves, pursuant to the Rule 38(c) of this Court, for leave to intervene, to be heard upon brief and oral argument and otherwise to participate fully in this proceeding as a party in support of the orders

BLEED THROUGH

of the Federal Power Commission (hereinafter referred to as "Commission") which petitioners seek to have reviewed and set aside in this proceeding. In support of this motion, Phillips respectfully states:

I.

Phillips is a corporation organized and existing under the laws of the State of Delaware, with its principal operating office in Bartlesville, Oklahoma.

II.

The Commission action sought to be reviewed in this proceeding directly affects Phillips. The proceeding below was styled "In the Matter of the Phillips Petroleum Company, Docket No. G-1148," and was instituted by an order of the Commission dated October 28, 1948, which provided in part:

"The Commission, upon its own motion, *orders* that:

An investigation of Respondent, Phillips Petroleum Company, be and hereby is instituted for the purpose of enabling the Commission:

(A) To determine with respect to the Respondent:

(i) Whether it is a natural-gas company within the meaning of the Natural Gas Act; and

(ii) Whether, in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, any rates, charges, or classifications demanded, ob-

served, charged, or collected, or any rules, regulations, practices or contracts affecting such rates, charges, or classifications are unjust, unreasonable, unduly discriminatory, or preferential; and

(B) If it shall find, after hearing, that the Respondent is a natural-gas company within the meaning of the Natural Gas Act, and that any of Respondent's rates, charges, classifications, rules, regulations, practices, or contracts, subject to the jurisdiction of the Commission, are unjust, unreasonable, unduly discriminatory or preferential, to determine and fix by order or orders just and reasonable, nondiscriminatory or nonpreferential rates, charges, classifications, rules, regulations, practices, or contracts to be thereafter observed and in force."

Hearings in said proceeding were begun before an Examiner of the Commission on April 3, 1951, and concluded May 23, 1951. By order dated April 16, 1951, the Commission directed that the hearing be limited initially to the issue of whether Phillips is a " 'natural-gas company' within the meaning of the Natural Gas Act," and that a further hearing as to the remaining issues be held later, if necessary. Counsel for Phillips participated in the proceeding before the Examiner and filed briefs and made an oral argument before the Commission. The record before the Commission included approximately 6,000 pages of oral testimony and 196 exhibits.

In its Opinion and Order No. 217, dated August 16, 1951, issued August 22, 1951, the Commission found:

"(1) Phillips Petroleum Company is engaged in the 'production and gathering' of natural gas within

BLEED THROUGH

the meaning of Section 1(b) of the Natural Gas Act.

(2) Phillips' movement of gas in interstate commerce and its sales thereof for resale in interstate commerce, together with its processing operations, all constitute a part of its gathering business, or they are incidents or activities related to such business, so that such movement, processing, and sales come within the exemption of production and gathering in Section 1(b) of the Act.

(3) Phillips Petroleum Company is not a 'natural-gas company' within the meaning of Sections 1(b) or 2(6) of the Natural Gas Act."

Pursuant thereto the Commission ordered:

"That the proceeding initiated by the Commission's order of October 28, 1948, in Docket No. G-1148 be, and the same hereby is, terminated."

Petitioners herein thereafter filed with the Commission a petition for rehearing. That petition was denied by the Commission by an order dated September 27, 1951, and issued September 28, 1951.

III.

Petitioners have filed in this Court a petition to review and set aside (a) the order of the Commission dated August 16, 1951 and issued on August 22, 1951, holding that Phillips is not a "natural-gas company" and that its sales of natural gas and other natural gas operations are not subject to regulation by the Commission, and (b) the order of the Commission of September 28, 1951, denying petitioners'

petition for rehearing. The petition herein asks this Court to determine generally that Phillips is a "natural-gas company" within the meaning of the Natural Gas Act, and, as such, subject to the jurisdiction of the Commission under said Act and, more specifically, to determine that certain of Phillips' sales of natural gas are subject to regulation by the Commission.

IV.

The relief sought by petitioners, if granted, would substantially and directly affect Phillips and its operations. Phillips, therefore, has a direct and immediate interest in the outcome of this proceeding which is not completely represented by any other party.

WHEREFORE, Phillips respectfully moves this Court for leave to intervene, to be heard on oral argument and on brief and otherwise to participate fully in this proceeding as a party in support of the orders which petitioners seek to have reviewed and set aside.

Respectfully submitted,

HUGH B. COX
Union Trust Building
Washington 5, D. C.

RAYBURN L. FOSTER
HARRY D. TURNER
WARREN M. SPARKS
KENNETH HEADY
c/o Phillips Petroleum Company
Bartlesville, Oklahoma

Attorneys for
Phillips Petroleum Company

Dated: January 25, 1952

BLEED THROUGH
BLURRED COPY

CERTIFICATE OF SERVICE

The undersigned, attorney for Phillips Petroleum Company, hereby certifies that on January 28, 1952, he served a copy of the foregoing motion to intervene upon each of the parties of record in this proceeding by duly mailing a copy thereof by registered mail, properly addressed and with postage prepaid, to counsel of record for each of said parties as follows:

Bradford Ross, Esq.
General Counsel for Federal Power Commission
1800 Pennsylvania Avenue, N. W.
Washington 6, D. C.

William E. Torkelson, Esq.
1 W. Wilson Street
Madison, Wisconsin
Attorney for the State of Wisconsin,
Petitioner

Stewart G. Honeck, Esq.
State Capital
Madison, Wisconsin
Attorney for Public Service Commission,
Petitioner.

HUGH B. COX
Attorney for
Phillips Petroleum Company

UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 11,247 JANUARY TERM, 1952

State of Wisconsin and Public Service Commission of Wisconsin,
Petitioners,

v.

Federal Power Commission,
Respondent.

No. 11,241 JANUARY TERM, 1952

City of Detroit, Michigan,
Petitioner,

v.

Federal Power Commission,
Respondent.

No. 11,242 JANUARY TERM, 1952

City of Kansas City, Missouri,
Petitioner,

v.

Federal Power Commission,
Respondent.

No. 11,245 JANUARY TERM, 1952

City of Milwaukee, Wisconsin, a municipal corporation,
Petitioner,

v.

Federal Power Commission,
Respondent.

BLEED THROUGH

BLURRED COPY

No. 11,252 JANUARY TERM, 1952

County of Wayne, Michigan,
Petitioner,

v.

Federal Power Commission,
Respondent.

Before: Stephens, Chief Judge, in Chambers

ORDER

Upon consideration of the motion of Phillips Petroleum Company for leave to intervene in the above-entitled cases, to be allowed to file a brief and to be allowed to argue therein, and respondent having informed the Clerk of this Court by letter that it has no objection thereto and it appearing that none of the petitioners herein have filed objections to said motion, it is

ORDERED that the motion be, and it is hereby, granted.

Dated: FEB 9 - 1952

United States Court of Appeals
For the
District of Columbia Circuit

FILED FEB 9 1952

JOSEPH W. STEWART
Clerk

UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

MOTION OF STATE OF NEW MEXICO, ET AL. FOR LEAVE TO INTERVENE

Comes now the State of New Mexico, and the Oil Conservation Commission, of the State of New Mexico, by its attorneys, Attorney General, Joe L. Martinez, and Peter N. Chumbris, Special Assistant Attorney General, State of New Mexico, and respectfully move, pursuant to the Rule 38(c) of this Court, for leave to intervene, to be heard upon brief and oral argument and otherwise to participate fully in this proceeding as a party in support of the order of the Federal Power Commission which petitioner seeks to have reviewed and set aside in this proceeding. In support of this motion, State of New Mexico, Et al, respectfully state:

I.

That the Oil Conservation Commission is an agency of the State of New Mexico.

II.

The Federal Power Commission action sought to be reviewed in this proceeding affects the State of New Mexico, and the Oil Conservation Commission. The proceeding below was styled IN THE MATTER OF THE PHILLIPS PETROLEUM COMPANY, DOCKET NO. G-1148 AND WAS INSTITUTED BY AN ORDER OF THE FEDERAL

BLEED THROUGH

BLURRED COPY

POWER COMMISSION DATED OCTOBER 28, 1948. The State of New Mexico, and the Oil Conservation Commission of the State of New Mexico, filed a motion for leave to intervene and were permitted to intervene in said matter below.

Hearings in said proceeding were begun before an Examiner of the Commission on April 3, 1951, and concluded May 23, 1951. By order dated April 16, 1951, the Commission directed that the hearing be limited initially to the issue of whether the Phillips Petroleum Company is a natural gas company within the meaning of the Natural Gas Act, and that a further hearing as to the remaining issues to be held later, if necessary. Counsel for the State of New Mexico, Et al, participated in the proceeding before the Examiner and filed briefs and made an oral argument before the Federal Power Commission. The record before the Commission included approximately 125 pages of oral testimony and exhibits.

In its Opinion and Order No. 217, dated August 16, 1951, issued August 22, 1951, The Federal Power Commission found that it did not have jurisdiction over independent producers and gatherers of natural gas. The petitioners, State of Wisconsin and Public Service Commission of Wisconsin, thereafter filed with the Federal Power Commission a petition for rehearing. That petition was denied by the Federal Power Commission by an order dated September 27, 1951, and issued September 28, 1951.

III.

The petitioners have filed in this Court a petition to review and set aside (a) the order of the Federal Power Commission dated August 16, 1951 and issued on August 22, 1951; and (b) the order of the Federal Power Commission of September 28, 1951, denying the petitioners petition for rehearing. The petition herein asks this Court to determine generally that Phillips Petroleum Company is a natural gas Company within the meaning of the Natural Gas Act.

IV.

The State of New Mexico and the Oil Conservation Commission of the State of New Mexico, contended in the proceeding below that they were constitutionally competent to regulate independent producers and gatherers of natural gas of which Phillips Petroleum Company was one. and that in view of the decision in the Inter-State Natural Gas Company, v. Federal Power Commission, 331 U. S. 682, the State of New Mexico, Et al, intervened to substantiate that contention which was upheld in the Opinion of the Federal Power Commission.

V.

The relief sought by the petitioners, if granted, would affect the jurisdiction of the Oil Conservation Commission over independent producers and gatherers of natural gas, of which Phillips Petroleum Company is one and, therefore,

BLEED THROUGH

BLURRED COPY

the State of New Mexico and the Oil Conservation Commission of the State of New Mexico, have a direct and immediate interest in the outcome of this proceeding which is not completely represented by any other party.

WHEREFORE, the State of New Mexico and the Oil Conservation Commission of the State of New Mexico, respectfully move this Court for leave to intervene, to be heard on oral argument and on brief and otherwise to participate fully in this proceeding as a party in support of the order which the petitioners seek to have reviewed and set aside.

Respectfully submitted,

JOE L. MARTINEZ
JOE L. MARTINEZ
Attorney General
State of New Mexico
Santa Fe, New Mexico

PETER N. CHUMBRIS
Special Assistant Attorney General
State of New Mexico
322 West Gold Avenue
Albuquerque, New Mexico

Dated January 31, 1952.

CERTIFICATE OF SERVICE

The undersigned, attorney for State of New Mexico and the Oil Conservation Commission of the State of New Mexico, hereby certifies that on February 1, 1952, he served a copy of the foregoing motion to intervene upon each of the parties of record in this proceeding by duly mailing

a copy thereof, properly addressed and with postage prepaid, to counsel of record for each of said parties as follows:

Bradford Ross, Esq.
General Counsel for Federal Power Commission
1800 Pennsylvania Avenue, N. W.
Washington 6, D. C.

Stewart G. Honeck, Esq.
Attorney for State of Wisconsin,
William E. Torkelson, Esq.
Attorney for Public Service Commission,
State Capital
Madison, Wisconsin
Petitioners.

/s/ PETER N. CHUMBRIS
PETER N. CHUMBRIS
Special Assistant Attorney General
State of New Mexico, for
State of New Mexico, Et al.

UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 11,247 JANUARY TERM, 1952

State of Wisconsin and Public
Service Commission of Wisconsin,
Petitioners,

v.

Federal Power Commission,
Respondent.

Phillips Petroleum Company,
Intervenor.

BLEED THROUGH

BLURRED COPY

No. 11,241 JANUARY TERM, 1952

City of Detroit, Michigan,
Petitioner,

v.

Federal Power Commission,
Respondent.

Phillips Petroleum Company,
Intervenor.

No. 11,242 JANUARY TERM, 1952

City of Kansas City, Missouri,
Petitioner,

v.

Federal Power Commission,
Respondent.

Phillips Petroleum Company,
Intervenor.

No. 11,245 JANUARY TERM, 1952

City of Milwaukee, Wisconsin,
a municipal corporation,
Petitioner,

v.

Federal Power Commission,
Respondent.

Phillips Petroleum Company,
Intervenor.

No. 11,252 JANUARY TERM, 1952

County of Wayne, Michigan,
Petitioner,

v.

Federal Power Commission,
Respondent.

Phillips Petroleum Company,
Intervenor.

Before: Stephens, Chief Judge and Proctor and Bazelon, Circuit Judges, in Chambers

ORDER

Upon consideration of the motion of the State of New Mexico and the Oil Conservation Commission of the State of New Mexico for leave to intervene in the above-entitled cases, to be allowed to file a brief and to be allowed to argue therein, and respondent having informed the Clerk of this Court by letter that it has no objection thereto and it appearing that none of the petitioners herein have filed objections to said motion, it is

ORDERED by the Court that the motion be, and it is hereby, granted.

Dated: MAR 3 - 1952

Per Curiam.

United States Court of Appeals
For the
District of Columbia Circuit

FILED MAR 3 - 1952

JOSEPH W. STEWART
Clerk

BLEED THROUGH
BLURRED COPY

UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

MOTION OF THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA FOR LEAVE TO INTERVENE

The Corporation Commission of the State of Oklahoma (hereinafter referred to as "Corporation Commission") moves the Court, pursuant to Rule 38(c) of this Court, for leave to intervene, to file briefs and to otherwise participate fully in the above proceedings as a party in support of the orders of the Federal Power Commission which petitioners seek to have reviewed and set aside and in support of said motion respectfully alleges:

1. The Corporation Commission is an agency of the State of Oklahoma created by the Constitution of said State and has, among other things, the duty, power and authority to regulate the production and gathering of natural gas for the purpose of preventing waste and protecting the correlative property rights of common owners.

2. The review of the orders of the Federal Power Commission sought by petitioners would directly and materially affect the Corporation Commission in the discharge of its duties to regulate the production and gathering of natural gas.

3. The orders sought to be reviewed were entered in a proceeding before the Federal Power Commission styled, "In the Matter of Phillips Petroleum Company, Docket No. G-1148." The issue adjudicated in said proceeding was whether certain sales of natural gas by Phillips Petroleum Company (hereinafter referred to as "Phillips") and its

operations in connection therewith rendered Phillips a "natural gas company" under the Natural Gas Act and subjected said sales and operations to the jurisdiction and regulation of the Federal Power Commission.

4. Certain of the sales of Phillips involved in said proceeding were sales of gas produced in the State of Oklahoma, namely, sales to Panhandle Eastern Pipe Line Company, Michigan - Wisconsin Pipe Line Company and Cities Service Gas Company. (See Exhibits 9(a), 11(a) and 52.) As to all gas produced in Oklahoma and so sold to said companies, this Corporation Commission regulates the spacing, drilling and plugging of the wells, the production of the gas (and oil, if any), the ratable taking of the gas, the gathering, marketing and utilization of the gas under a comprehensive system of conservation statutes, rules and regulations. (See Exhibits 162, 162-A to 162-R incl.)

5. A portion of the gas sold by Phillips to Panhandle Eastern Pipe Line Company and to Michigan-Wisconsin Pipe Line Company is produced from the Guymon-Hugoton Field located in Texas County, Oklahoma. The Guymon-Hugoton Field is a part of the largest single gas reservoir in the United States which extends from the State of Kansas through the Oklahoma Panhandle into the State of Texas and from which several hundred wells are producing natural gas.

The Corporation Commission after public hearing on the 9th day of December, 1946, entered an order (Exhibit 120) fixing a price of 7¢ per thousand cubic feet as the minimum price which must be realized by the producer at the wellhead for gas produced in the Guymon-Hugoton

BLEED THROUGH

BLURRED COPY

Field. The validity of said order was sustained by the Supreme Court of Oklahoma on January 17, 1950, against attacks by Cities Service Gas Company and Phillips Petroleum Company (220 P. 2d 279). Appeals were taken to the Supreme Court of the United States, which on December 11, 1950, likewise affirmed the validity of said order in *Cities Service Gas Company* v. *Peerless Oil and Gas Company,* 340 U. S. 179, and *Phillips Petroleum Company* v. *State of Oklahoma,* 340 U. S. 190.

6. The gas sold by Phillips to Cities Service Gas Company is casinghead gas produced from the West Edmond Field located in Oklahoma. Pursuant to authority vested in the Corporation Commission by Title 52 O. S., §286.1 *et seq.*, the Commission, after notice and hearing, on the 29th day of July, 1947, entered an order approving the unitization of the West Edmond Hunton Lime Unit. (See Exhibit 52.)

By virtue of said unitization and order, the owners of the numerous oil and gas leases covering the field no longer own the production from their segregated tracts, but in lieu thereof receive a pro rata share of the oil and gas produced from the Unit. Sohio Petroleum Company is the operator of the Unit. By contract with the Unit, Phillips and other owners of two gasoline plants located in the field gather the gas from the wells, process it for its gasoline content and deliver the residue gas to the purchasers (Cities Service Gas Company being one) for the account of the Unit Owners. Phillips is one of the Unit Owners by virtue of its original ownership of leases covered by the unitization. (See Exhibit 52.)

7. This Corporation Commission intervened in the proceeding before the Federal Power Commission *contending that* the sales of Phillips, insofar as they involved gas produced within the State of Oklahoma, were not subject to the jurisdiction of said Commission for the reason that said sales fell within the exception of such jurisdiction stated by the Supreme Court of the United States in *Interstate Natural Gas Company* v. *Federal Power Commission*, 331 U. S. 682, 91 L. ed. 1742, 68 S. Ct. 30, in the following language:

> "Thus, where sales, though technically consummated in interstate commerce, are made during the course of production and gathering and are so closely connected with the local incidents of that process as to render rate regulation by the Federal Power Commission inconsistent or a substantial interference with the exercise by the State of its regulatory functions, the jurisdiction of the Federal Power Commission does not attach."

8. At the hearing before the Federal Power Commission, Ray C. Jones, a member of this Commission, and Elmer Capshaw, a petroleum and natural gas engineer in the employ of this Commission for 17 years, testified in support of its position. The Corporation Commission filed a written brief with the Federal Power Commission, and the Attorney General of Oklahoma made an oral argument in support of its contentions when the matter was heard by the Federal Power Commission sitting en banc on July 9 and 10, 1951.

9. In its Opinion and Order No. 217 dated August 16, 1951, issued August 22, 1951, the Federal Power Commis-

BLEED THROUGH

BLURRED COPY

sion found that Phillips was not a "natural gas company" within the meaning of the Natural Gas Act, and dismissed the proceeding. As one ground for said conclusion and order the Commission found:

> "In addition to the conclusions we have already reached, the evidence in this case supplies still another type of barrier to our regulation of Phillips' sales. Though technically consummated in interstate commerce, these sales are made 'during the course of production and gathering.' And we expressly find that they are so closely connected with the local incidents of that process as to render rate regulation by this Commission inconsistent or a substantial interference with the exercise by the affected States of their regulatory functions."

Commissioner Draper in a special concurring opinion agreed with this ground of the Commission's decision saying:

> "The second ground for the majority decision is its finding that inconsistency or substantial interference with state regulation would result from regulation of Phillips' sales by this Commission. I agree with this finding. My exhaustive study of the record in this case convinces me that there would clearly result a conflict of the sort contemplated by the language used in the Interstate opinion. Since this is so, as the Court said in that case, 'The jurisdiction of the Federal Power Commission does not attach.' "

10. Petitioners have filed in this Court petitions to review and set aside the order of the Federal Power Commission holding that Phillips is not a "natural gas company" and that its sales of natural gas and other natural gas oper-

ations, including those in the State of Oklahoma, are not subject to regulation by the Federal Power Commission. Said petitions in effect ask this Court to determine that Phillips' sales of gas to Panhandle Eastern Pipe Line Company, Michigan-Wisconsin Pipe Line Company and Cities Service Gas Company and certain of its pipe line operations are subject to regulation by the Federal Power Commission. The regulation by the Federal Power Commission of said sales or of any of the operations of Phillips conducted in connection therewith in the State of Oklahoma would constitute a substantial interference with the exercise of the power of the State of Oklahoma through this Corporation Commission to regulate the production and gathering of such gas. Such regulation would directly interfere with the power of, and its exercise by, the State of Oklahoma through this Corporation Commission to fix and determine the prices at which gas can be produced from wells located within the State for the purpose of preventing economic and physical waste of natural gas and protecting the correlative property rights of all persons interested in common sources of supply. The Federal Power Commission's fixing of the prices to be received by Phillips from such sales would be inconsistent with and constitute a substantial interference with the power of, and its exercise by, the State of Oklahoma through this Corporation Commission to promulgate and enforce rules, regulations and orders relating to the production and gathering of natural gas within the State of Oklahoma for the purpose of preventing or minimizing waste and protecting correlative property rights of owners in common sources of supply. Thus, the relief sought by petitioners, if granted, would substantially and directly affect this Corporation Commission in the dis-

BLEED THROUGH

BLURRED COPY

charge of its powers and duties and it therefore has a direct and immediate interest in the outcome of these proceedings which is not completely represented by any other party.

WHEREFORE, the Corporation Commission of the State of Oklahoma respectfully moves this Court for leave to intervene in these proceedings, to file briefs therein, and to otherwise participate fully as a party in support of the orders which petitioners seek to have reviewed and set aside.

Respectfully submitted,

/s/ MAC Q. WILLIAMSON
Mac Q. Williamson
Attorney General for the
State of Oklahoma
State Capitol Building
Oklahoma City, Oklahoma

/s/ FLOYD GREEN
Floyd Green
Conservation Attorney for
the State of Oklahoma
State Capitol Office Building
Oklahoma City, Oklahoma

/s/ J. PAULL MARSHALL
J. Paul Marshall
Union Trust Building
Washington 5, D. C.

Attorneys for the Corporation
Commission of the State of
Oklahoma

CERTIFICATE OF SERVICE

The undersigned, attorney for the Corporation Commission of the State of Oklahoma, hereby certifies that on the 9th day of April, 1952, he served a copy of the foregoing motion to intervene upon each of the parties of record in these proceedings by duly mailing a copy thereof by depositing the same in the United States mail, properly addressed and with postage prepaid, to counsel of record for each of said parties as follows:

Bradford Ross
General Counsel for Federal Power Commission
1800 Pennsylvania Avenue, N. W.
Washington 6, D. C.

William E. Torkelson
1 W. Wilson Street
Madison, Wisconsin
Attorney for the State of Wisconsin,
Petitioner

Stewart G. Honeck
State Capitol
Madison, Wisconsin
Attorney for Public Service Commission
Petitioner

James H. Lee
Assistant Corporation Counsel
301 City Hall
Detroit 26, Michigan
Attorney for City of Detroit, Michigan,
Petitioner

David M. Proctor
City Counselor

BLEED THROUGH
BLURRED COPY

2800 City Hall
Kansas City, Missouri
Attorney for City of Kansas City, Missouri, Petitioner

Walter J. Mattison
City Attorney
801 City Hall
Milwaukee 2, Wisconsin
Attorney for City of Milwaukee, Wisconsin, Petitioner

Gerald K. O'Brien
Prosecuting Attorney, County of Wayne
3400 Guardian Building
Detroit 26, Michigan
Attorney for Petitioner

Hugh B. Cox
701 Union Trust Building
Washington 5, D. C.
Attorney for Phillips Petroleum Company, Intervener

Rayburn L. Foster
c/o Phillips Petroleum Company
Bartlesville, Oklahoma
Attorney for Phillips Petroleum Company, Intervener

Harry D. Turner
c/o Phillips Petroleum Company
Bartlesville, Oklahoma
Attorney for Phillips Petroleum Company, Intervener

Warren M. Sparks
c/o Phillips Petroleum Company

Bartlesville, Oklahoma
Attorney for Phillips Petroleum Company
Intervener

Price Daniel
Attorney General for the State of Texas
Charles E. Crenshaw
Everett Hutchinson
Assistant Attorneys General for the State of Texas
Capitol Station
Austin, Texas
Attorneys for Railroad Commission of Texas,
Intervener

Joe L. Martinez
Attorney General for the State of New Mexico
Santa Fe, New Mexico
Attorney for Oil Conservation Commission
of the State of New Mexico
Intervener

/s/ J. PAULL MARSHALL
Attorney for the
Corporation Commission of the
State of Oklahoma

IN THE
UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

ANSWER OF STATE OF WISCONSIN AND PUBLIC SERVICE COMMISSION OF STATE OF WISCONSIN TO MOTION OF THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA FOR LEAVE TO INTERVENE

Come now the petitioners in No. 11,247, the State of Wisconsin and the Public Service Commission of Wis-

BLEED THROUGH
BLURRED COPY

consin, by the undersigned, their attorneys, and pursuant to Rules 31 (b) and (g) of this court, and 6 (e) of the Federal Rules of Civil Procedure, for their joint answer to the motion for leave to intervene of the Corporation Commission of the State of Oklahoma, and deny and allege as follows:

1. Respecting the allegations of paragraph 2 of said motion specifically deny that the review of the orders of the Federal Power Commission sought by petitioners would directly and materially affect said Corporation Commission in the discharge of its duties to regulate the production and gathering of natural gas.

2. Respecting the allegations of paragraph 7 of said motion, admit that said Corporation Commission intervened in the proceeding before the Federal Power Commission and made the contention that the sales of Phillips, insofar as they involved gas production within the State of Oklahoma, were not subject to the jurisdiction of the said Federal Power Commission, for the reasons alleged therein; but specifically deny that the sales in question fell within the exception of such jurisdiction as stated by the supreme court of the United States in *Interstate Natural Gas Company v. Federal Power Commission,* 331 U. S. 682. Allege that said sales as a matter of constitutional law are beyond the regulatory powers of the State of Oklahoma, and deny that such sales are encompassed within the words "production and gathering" as used in sec. 1 (b) of the Natural Gas Act. Deny that the sales in interstate commerce of natural gas to the five pipe line companies involved in this proceeding for resale for ultimate public consumption are sales of the type mentioned by the supreme court

in the *Interstate* case, quoted in paragraph 7 of the motion of the proposed intervenor. Alleges that the efforts of a state to conserve natural gas cannot be sustained where it amounts to a regulation of interstate commerce. *Pennsylvania v. West Virginia* (1923), 262 U. S. 553.

3. Respecting the allegations of paragraph 8 of said motion, alleges that the most that was claimed by Oklahoma's witnesses was by Ray C. Jones, member of the Corporation Commission, who testified that regulation of rates of interstate sales "might" conflict with orders of the Oklahoma Commission fixing a minimum price (7-cents Mcf) at the wellhead in the Guymon-Hugoton Field (R. 4533), but conceded that if the Power Commission fixed a rate in excess of that minimum, there would be no conflict. The 7-cent minimum is met when 3-cents of the liquid hydrocarbons are extracted from each Mcf and the residue sold for any price in excess of 4-cents Mcf. Sales by Phillips to Panhandle Eastern at Hansford Plant, which includes gas originating in Oklahoma, at 4.67-cents Mcf have not been declared to be in violation of law. See Exhibit 120-A. Sales to Michigan-Wisconsin Pipeline Company in 1950 are at an average of 8.17-cents Mcf.

4. Respecting the allegations of paragraph 10 of said motion, deny that regulation by the Federal Power Commission of the sales in question in the State of Oklahoma would constitute a substantial interference with the exercise of the power of the State of Oklahoma through the movant Corporation Commission to regulate the production and gathering of gas. Deny that such regulation would directly interfere with the power of, or the exercise by, the State of Oklahoma through movant Commission to fix

BLEED THROUGH

BLURRED COPY

and determine the prices at which gas can be produced from wells located within said state for the purpose of preventing economic and physical waste of natural gas and protecting the correlative property rights of all persons interested in common sources of supply. Deny that the regulation of rates by the Federal Power Commission for the sales in question would be inconsistent with or constitute a substantial interference with the power of or exercise of power by the State of Oklahoma in the respects set forth in said paragraph 10, and in answer thereto repeats and incorporates into this paragraph by reference the allegations set forth in the preceding paragraph 3 hereof.

Wherefore, the State of Wisconsin and the Public Service Commission of Wisconsin move this court for an order denying the motion of the Corporation Commission of the State of Oklahoma to intervene herein.

Respectfully,

VERNON W. THOMSON /s/
Vernon W. Thomson, Attorney General of Wisconsin

STEWART G. HONECK /s/
Stewart G. Honeck, Deputy Attorney General of Wisconsin

Attorneys for Petitioner, State of Wisconsin

WILLIAM E. TORKELSON /s/
William E. Torkelson, Chief Counsel Public Service Commission of Wisconsin

Attorney for Petitioner, Public Service Commission of Wisconsin

April 15, 1952

MOTION OF THE STATE OF TEXAS THROUGH THE RAILROAD COMMISSSION OF TEXAS FOR LEAVE TO INTERVENE

Comes now the State of Texas through the Railroad Commission of Texas represented by Price Daniel, the Attorney General of Texas, and respectfully moves this Honorable Court, pursuant to Rule 38(c), for leave to intervene, to be heard upon brief and oral argument and to participate fully in these proceedings as a party in support of the order of the Federal Power Commission sought to be reviewed and set aside by Petitioners herein. In support of its motion, the Railroad Commission of Texas respectfully shows:

I.

The Railroad Commission of Texas is a governmental agency of the State of Texas, created and existing under the Constitution and laws of the State of Texas, having the power, duty and responsibility to regulate the common carriers and gas utilities doing business within the State and having jurisdiction, authority and responsibility to administer the laws of the State relating to conservation and prevention of waste of natural gas and petroleum and the protection of correlative property rights. The members of the Railroad Commission at the present time are Olin Culberson, Chairman, W. J. Murray, Jr., and Ernest O. Thompson.

BLEED THROUGH

BLURRED COPY

II.

The matters involved in Federal Power Commission order in Docket No. G-1148, sought to be reviewed and set aside herein by Petitioners, directly affect the powers, duties and responsibilities of the Railroad Commission of Texas. In the hearings below the Railroad Commission of Texas filed a Motion For Leave To Intervene and was permitted to do so. The Railroad Commission of Texas, after being permitted to intervene in the hearings below, took an active part in the hearings, introducing evidence showing that any action by the Federal Power Commission asserting jurisdiction over Phillips Petroleum Company would amount to a substantial interference with the duties, powers and jurisdiction of the Railroad Commission of Texas. In support of its position, the Railroad Commission of Texas filed briefs and made oral argument before the Federal Power Commission. At the completion of the hearing, filing of briefs and oral argument, the Federal Power Commission in its opinion and order No. 217, dated August 16, 1951, issued August 22, 1951, found that it did not have jurisdiction over Phillips Petroleum Company. Petitioners have filed in this Court a petition to review and set aside (a) the order of the Federal Power Commission dated August 16, 1951, and issued on August 22, 1951, and (b) the order of the Federal Power Commission of September 28, 1951, denying petition for rehearing. Further, the petitioners herein ask this Honorable Court to determine generally that the Phillips Petroleum Company is a natural gas company within the meaning of the Natural Gas Act.

III.

The Railroad Commission of Texas has an interest in the above entitled proceeding to the extent that the same relates to the production, transportation, use, conservation and prevention of waste, of natural gas within the State of Texas, and the protection of correlative property rights. The relief sought by Petitioners herein, if granted, would substantially interfere with the power of the State of Texas to regulate through the Railroad Commission of Texas the production and gathering of gas. The regulation of prices or sales of gas produced in Texas by Phillips Petroleum Company or other like producers or gatherers of natural gas are not subject to the jurisdiction of the Federal Power Commission in that such sales, though technically consummated in interstate commerce, are made during the course of production and gathering and are so closely connected with production and gathering as to render regulation by the Federal Power Commission inappropriate and a substantial interference with the regulatory functions of the Railroad Commission.

IV.

The State of Texas through its Railroad Commission therefore is directly and vitally concerned over the issues and questions involved in these proceedings. The interest of the State of Texas is not completely represented by any other party herein.

WHEREFORE, the State of Texas through its Railroad Commission of Texas, respectfully moves this Honorable

BLEED THROUGH

BLURRED COPY

Court for leave to intervene herein, to be heard on brief and to be permitted to participate fully in these proceedings as a party in support of the Federal Power Commission order which Petitioners seek to have reviewed and set aside.

Respectfully submitted,

J. PAULL MARSHALL
J. Paull Marshall
Union Trust Building
Washington 5, D. C.

PRICE DANIEL
Attorney General of the
State of Texas

CHARLES E. CRENSHAW
Executive Assistant
Attorney General
Capitol Station
Austin, Texas

Attorneys for the Railroad
Commission of Texas

Dated: April 10, 1952

CERTIFICATE OF SERVICE

The undersigned, attorney for the Railroad Commission of Texas, hereby certifies that on April 10, 1952, he served a copy of the foregoing motion to intervene upon each of the parties of record in this proceeding by duly mailing a copy thereof by registered mail, properly addressed with postage prepaid, to counsel of record for each of said parties as follows:

Bradford Ross
General Counsel for Federal Power Commission
1800 Pennsylvania Avenue, N. W.
Washington 6, D. C.

William E. Torkelson
1 W. Wilson Street
Madison, Wisconsin
Attorney for the State of Wisconsin,
Petitioner

Stewart G. Honeck
State Capitol
Madison, Wisconsin
Attorney for Public Service Commission
Petitioner

James H. Lee
Assistant Corporation Counsel
301 City Hall
Detroit 26, Michigan
Attorney for City of Detroit, Michigan,
Petitioner

David M. Proctor
City Counselor
2800 City Hall
Kansas City, Missouri
Attorney for City of Kansas City, Missouri,
Petitioner

Walter J. Mattison
City Attorney
801 City Hall
Milwaukee 2, Wisconsin
Attorney for City of Milwaukee, Wisconsin,
Petitioner

Gerald K. O'Brien
Prosecuting Attorney, County of Wayne

BLEED THROUGH
BLURRED COPY

3400 Guardian Building
Detroit 26, Michigan
Attorney for Petitioner.

Hugh B. Cox
701 Union Trust Building
Washington 5, D. C.
Attorney for Phillips Petroleum Company
Intervener

Rayburn L. Foster
c/o Phillips Petroleum Company
Bartlesville, Oklahoma
Attorney for Phillips Petroleum Company
Intervener

Harry D. Turner
c/o Phillips Petroleum Company
Bartlesville, Oklahoma
Attorney for Phillips Petroleum Company
Intervener

Warren M. Sparks
c/o Phillips Petroleum Company
Bartlesville, Oklahoma
Attorney for Phillips Petroleum Company
Intervener

Mac Q. Williamson
Attorney General for the State of Oklahoma
State Capitol Building
Oklahoma City, Oklahoma

Floyd Green
Conservation Attorney for the State of Oklahoma
State Capitol Office Building
Oklahoma City, Oklahoma
Attorneys for the Corporation Commission of
the State of Oklahoma
Intervener

Joe L. Martinez
Attorney General
State of New Mexico
Santa Fe, New Mexico

Peter N. Chumbris
Special Assistant Attorney General
State of New Mexico
322 West Gold Avenue
Albuquerque, New Mexico
Attorneys for State of New Mexico, et al.
Intervener

J. PAULL MARSHALL
J. Paull Marshall
Union Trust Building
Washington 5, D. C.

Attorney for the Railroad
Commission of Texas

IN THE
UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 11,247

State of Wisconsin and Public
Service Commission of Wisconsin
Petitioners,

v.

Federal Power Commission,
Respondent

BLEED THROUGH
BLURRED COPY

No. 11,241

City of Detroit, Michigan
Petitioner,

v.

Federal Power Commission
Respondent.

No. 11,242

City of Kansas City, Missouri
Petitioner,

v.

Federal Power Commission,
Respondent

No. 11,245

City of Milwaukee,
a municipal corporation
Petitioner,

v.

Federal Power Commission
Respondent

No. 11,252

County of Wayne, Michigan
Petitioner,

v.

Federal Power Commission,
Respondent

STIPULATION WITH RESPECT TO THE MOTIONS TO INTERVENE OF THE STATE OF TEXAS THROUGH ITS RAILROAD COMMISSION AND THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA AND THE MOTIONS OF THE STATE OF WISCONSIN AND ITS PUBLIC SERVICE COMMISSION TO DISMISS THE AFORESAID MOTIONS TO INTERVENE

1. The State of Texas through its Railroad Commission and the Corporation Commission of the State of Oklahoma have petitioned to intervene in the foregoing proceeding and the State of Wisconsin and its Public Service Commission have moved to dismiss the aforesaid motion to intervene.

2. It is agreed by the parties that the withdrawal by the State of Wisconsin and its Public Service Commission of their motions to dismiss the motions to intervene shall not in any way constitute an admission by the State of Wisconsin or its Public Service Commission of the truth of the allegations in the aforesaid motions to intervene, or in any way be determinative of the merits of this proceeding on appeal.

3. It is further agreed that the State of Wisconsin and its Public Service Commission do hereby withdraw their motions to dismiss the aforesaid motions of the States of Texas and Oklahoma to intervene and will not object to the grant of such motions.

Vernon W. Thomson
Attorney General

By CHARLES S. RHYNE /s/
Charles S. Rhyne

Attorneys for the State of Wisconsin

BLEED THROUGH

BLURRED COPY

William E. Torkelson
Chief Counsel

By CHARLES S. RHYNE /s/
Charles S. Rhyne

Attorneys for the Public Service Commission of Wisconsin

Price Daniel
Attorney General

Charles E. Crenshaw
Executive Assistant Attorney General

By J. PAULL MARSHALL /s/
J. Paull Marshall

Attorneys for the Railroad Commission of Texas

Mac Q. Williamson
Attorney General

Floyd Green
Conservation Attorney for the State of Oklahoma

By J. PAULL MARSHALL /s/
J. Paull Marshall

Attorneys for the Corporation Commission of the State of Oklahoma

BRADFORD ROSS /s/
Bradford Ross

General Counsel Federal Power Commission

Attorney for the Respondent

ERNEST W. JENNES /s/
Ernest W. Jennes

Attorney for Phillips Petroleum Company
Intervener

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing Stipulation With Respect To The Motions To Intervene of the State of Texas Through Its Railroad Commission and the Corporation Commission of the State of Oklahoma and the Motions of the State of Wisconsin and its Public Service Commission to Dismiss the Aforesaid Motions to Intervene by mailing a copy thereof to each of the following persons at the respective addresses hereinafter specified.

James H. Lee
Assistant Corporation Counsel
301 City Hall
Detroit 26, Michigan
Attorney for City of Detroit, Michigan
Petitioner

David M. Proctor
City Counselor
2800 City Hall
Kansas City, Missouri
Attorney for City of Kansas City, Missouri
Petitioner

Walter J. Mattison
City Attorney
801 City Hall
Milwaukee 2, Wisconsin
Attorney for City of Milwaukee, Wisconsin
Petitioner

Charles S. Rhyne
730 Jackson Place, N. W.
Washington 6, D. C.
Attorney for County of Wayne, Michigan
Petitioner

BLEED THROUGH
BLURRED COPY

Joe L. Martinez
Attorney General
State of New Mexico
Santa Fe, New Mexico

Peter N. Chumbris
Special Assistant Attorney General
State of New Mexico
322 West Gold Avenue
Albuquerque, New Mexico

Attorneys for State of New Mexico, et al
Interveners

Dated at Washington, D. C., May 6, 1952

CHARLES S. RHYNE /s/
Charles S. Rhyne
730 Jackson Place, N. W.
Washington 6, D. C.

UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 11,247 APRIL TERM, 1952

State of Wisconsin and Public Service Commission of Wisconsin,
Petitioners,

v.

Federal Power Commission,
Respondent,
Phillips Petroleum Company,
Intervenor,
State of New Mexico and the Oil Conservation Commission of the State of New Mexico,
Intervenors.

No. 11,241 APRIL TERM, 1952

City of Detroit, Michigan,
Petitioner,

v.

Federal Power Commission,
Respondent,
Phillips Petroleum Company,
Intervenor,
State of New Mexico and the Oil Conservation Commission of the State of New Mexico,
Intervenors.

No. 11,242 APRIL TERM, 1952

City of Kansas City, Missouri,
Petitioner,

v.

Federal Power Commission,
Respondent,
Phillips Petroleum Company,
Intervenor,
State of New Mexico and the Oil Conservation Commission of the State of New Mexico,
Intervenors.

No. 11,245 APRIL TERM ,1952

City of Milwaukee, a municipal corporation,
Petitioner,

v.

Federal Power Commission,
Respondent,
Phillips Petroleum Company,

BLEED THROUGH
BLURRED COPY

Intervenor,
State of New Mexico and the Oil Conservation Commission of the State of New Mexico,
Intervenors.

No. 11,252 APRIL TERM, 1952

County of Wayne, Michigan,
Petitioner,

v.

Federal Power Commission,
Respondent,
Phillips Petroleum Company,
Intervenor,
State of New Mexico and the Oil Conservation Commission of the State of New Mexico,
Intervenors.

Before: Stephens, Chief Judge, and Edgerton and Proctor, Circuit Judges, in Chambers.

ORDER

These cases came on for consideration on the motion of the Corporation Commission of the State of Oklahoma for leave to intervene, and were argued by counsel for the State of Oklahoma and for the State of Wisconsin and the Public Service Commission of Wisconsin. Respondent has consented to the granting of this motion and the State of Wisconsin and Public Service Commission of Wisconsin, petitioners in No. 11,247, have filed a stipulation in which they state they will not object to the granting of said motion.

Upon consideration whereof, it is ORDERED by the Court that the motion of the Corporation Commission of the State of Oklahoma for leave to intervene be, and it is hereby, granted.

Dated: MAY 12 1952

Per Curiam

United States Court of Appeals
For the
District of Columbia Circuit

FILED MAY 12 1952

JOSEPH W. STEWART
Clerk

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 11,247 APRIL TERM, 1952

State of Wisconsin and Public Service Commission of Wisconsin,
Petitioners,

v.

Federal Power Commission,
Respondent,

Phillips Petroleum Company,
Intervenor,

State of New Mexico and the Oil Conservation Commission of the State of New Mexico,
Intervenors.

BLEED THROUGH

BLURRED COPY

No. 11,241 APRIL TERM, 1952

City of Detroit, Michigan,
Petitioner,

v.

Federal Power Commission,
Respondent,
Phillips Petroleum Company,
Intervenor,
State of New Mexico and the Oil
Conservation Commission of the
State of New Mexico,
Intervenors.

No. 11,242 APRIL TERM, 1952

City of Kansas City, Missouri,
Petitioner,

v.

Federal Power Commission,
Respondent,
Phillips Petroleum Company,
Intervenor,
State of New Mexico and the Oil
Conservation Commission of the
State of New Mexico,
Intervenors.

No. 11,245 APRIL TERM, 1952

City of Milwaukee, a municipal
corporation,
Petitioner,

v.

Federal Power Commission,
Respondent,
Phillips Petroleum Company,
Intervenor,

State of New Mexico and the Oil
Conservation Commission of the
State of New Mexico,
Intervenors.

No. 11,252 APRIL TERM, 1952

County of Wayne, Michigan,
Petitioner,

v.

Federal Power Commission,
Respondent,
Phillips Petroleum Company,
Intervenor,
State of New Mexico and the Oil
Conservation Commission of the
State of New Mexico,
Intervenors.

Before: Stephens, Chief Judge, and Edgerton and Proctor, Circuit Judges, in Chambers.

BLEED THROUGH
BLURRED COPY

ORDER

These cases came on for consideration on the motion of the State of Texas through the Railroad Commission of Texas for leave to intervene, and were argued by counsel for the State of Texas and for the State of Wisconsin and the Public Service Commission of Wisconsin. Respondent has consented to the granting of this motion and the State of Wisconsin and Public Service Commission of Wisconsin, petitioners in No. 11,247, have filed a stipulation in which they state they will not object to the granting of said motion.

Upon consideration whereof, it is ORDERED by the Court that the motion of the State of Texas through the Railroad Commission of Texas for leave to intervene herein be, and it is hereby, granted.

Dated: MAY 12 1952

Per Curiam

United States Court of Appeals
For the
District of Columbia Circuit

FILED MAY 12 1952

JOSEPH W. STEWART
Clerk

7

TESTIMONY IN DOCKET G-1148 TAKEN BEFORE FEDERAL POWER COMMISSION EXAMINER

[7]

PRESIDING EXAMINER [Edward Marsh]: On May 4, 1950, the Chairman of the Commission designated this Examiner to preside at the hearing required by its order of February 28.

Subsequent to the issuance of the order herein instituting an investigation, several states, state regulatory and other commissions, several cities, and a number of boards and associations have sought and received authorization to participate in this proceeding.

In a few moments I shall ask for the appearances of the parties and participants, including these interveners.

Before doing so, however, I want to announce that I have received from the secretary of the Commission the following memorandum, and I quote:

"March 30, 1951, Memorandum for: Presiding Examiner Marsh, Bureau of Law, Bureau of Accounts, Finance and Rates.

[8]

"For your information, the following is an excerpt from the minutes of a meeting of the Commission held on March 29, 1951:

" 'The Commission had before it the Motion to Limit Issues filed on March 27, 1951, by Phillips Petroleum Company in Docket No. G-1148, but

BLEED THROUGH

BLURRED COPY

decided to defer action thereon until the other parties to the proceeding have had the opportunity provided for by the Rules to file answers to said motion. Upon motion by Commissioner Draper, seconded by Commissioner Wimberly, the Commission (Commissioner Buchanan dissenting) directed that, in the meantime, the Examiner designated to preside at the hearing in said proceeding scheduled to commence on April 3, 1951, be instructed to confine the taking of testimony to Paragraph (A) (i) of the order of the Commission entered October 28, 1948, and issued October 29, 1948.' "

Signed Leon M. Fuquay, Secretary.

That memorandum was accompanied by a memorandum of transmitta[1], which reads as follows:

"Because of time limitations, we will not be able to serve notice of this action upon the participants in the proceeding. I will, therefore, appreciate it if you will have it spread upon the record at the

[9]

opening of the hearing."

* * *

[94]

CARL E. LUTTRING

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. McAllister

Q. What is your full name, Mr. Luttring? A. Carl E. Luttring.

Q. I believe you are employed by the Federal Power Commission? A. I am.

Q. In what capacity? A. Chief Examiner of Accounts in the Division of Accounts.

Q. I was wondering, how long have you been employed by the Federal Power Commission? A. I have been in the employ of the Federal Power Commission for 12 years.

* * *

[100]

Q. Mr. Luttring, have you prepared a statement entitled "Phillips Petroleum Company and Subsidiary Companies Consolidated Balance Sheets Per Books December 31, 1938 to 1950"? A. Yes.

* * *

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED EXHIBIT NO. 3 FOR IDENTIFICATION.)

* * *

[101]

Q. Mr. Luttring, with reference to Exhibit 3 marked for identification, will you state for the record the source of the figures which you have incorporated on that exhibit? A. All of the figures on Exhibit No. 3 have been taken from the financial reports and records of the company.

Q. Mr. Luttring, did you also prepare the exhibit of Phillips Petroleum Company and subsidiary companies,

BLEED THROUGH

BLURRED COPY

consolidated income account per books, years ended December 31, 1938 to December 31, 1950? A. I did.

* * *

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED EXHIBIT NO. 4 FOR IDENTIFICATION.)

* * *

Q. Mr. Luttring, by reference to that exhibit will you state what has been the source of the figures which are

[102]

embodied on that exhibit? A. The source of the figures used in Exhibit No. 4 was taken from financial reports of Phillips Petroleum Company in particular.

Q. Were all of the figures embodied on this exhibit figures taken from the books and records of Phillips Petroleum Company as they were made available to you? A. Yes, it was. I might add that the figures hereon are an exact duplicate of those shown in statements of the company which appear in the same form as set up herein.

Q. Mr. Luttring, I direct your attention to an exhibit entitled "Phillips Petroleum Company and Subsidiary Companies Gas Operations Condensed Income Account Per Books Years Ended December 31, 1938 to 1950," and ask you if that was prepared by you. A. Yes, it was.

* * *

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED EXHIBIT NO. 5 FOR IDENTIFICATION.)

* * *

Q. Mr. Luttring, what is the source of the figures that were referred to in the Condensed Income Account Per

[103]

Books as affected on the exhibit just marked for identification as Exhibit No. 5? A. All the figures appearing on Exhibit 5 are exactly in the same form as they appeared on financial reports and records of the company.

Q. Mr. Luttring, I direct your attention to a statement entitled "Phillips Petroleum Company and Subsidiary Companies Gas Operations Consolidated Income Account Year to Date, December 31, 1949," and ask you if that was prepared by you. A. Yes, it was.

* * *

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED EXHIBIT NO. 6 FOR IDENTIFICATION.)

* * *

Q. Mr. Luttring, by reference to the exhibit which has been marked as Exhibit No. 6, will you state whether or not those figures shown on Exhibit No. 6 for identification were obtained from the books and records of the Phillips Petroleum Company? A. Yes, they were. The figures on sheet one of Exhibit 6 are an exact duplication of a statement bearing the same title in the company's financial report.

* * *

[104]

THE WITNESS: The figures on pages 2 and 3 of Exhibit No. 6 were all taken from the company's financial

BLEED THROUGH

BLURRED COPY

report and were summarized on these sheets under my direction to support the column headed "Residue" on sheet one.

* * *

[105]

Q. Mr. Luttring, I direct your attention to an exhibit

[106]

entitled "Phillips Petroleum Company and Subsidiaries, Excess Earnings and Tax Savings, Natural Gas Department, Year Ended December 31, 1950," and ask if that was prepared by you. A. It was.

* * *

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED EXHIBIT NO. 7 FOR IDENTIFICATION.)

* * *

Q. Mr. Luttring, by reference to sheet one of Exhibit 7, which has been marked for identification, will you state what figures on sheet one have been taken from the books and records of the Phillips Petroleum Company and subsidiary companies? A. All figures on Schedule No. 1 of Exhibit 7, except the figures on the line indicated by "Return at assumed rate of 8-1/2 per cent," and the figures on the line indicated by "Excess earnings and tax savings" have been taken from the financial reports and records of the company.

* * *

[111]

Q. Now, as I understand it, Mr. Luttring, the figures that are on Schedule 1 down as far as the reference to eight and a half per cent is concerned, the dollar figures are figures which were taken from the books and records of Phillips and its subsidiary companies, is that right?

[112]

A. That is right.

Q. The cents per Mcf. sold at 14.65. p.s.i.a. that you show on the first column there, does that appear that way on the records or did you formulate that figure in some fashion? A. I believe that figure was filled in by our accounting staff.

Q. Could you state how it was arrived at? Was it obtained this way or can you—

A. By reference to Schedule 3, it will be found that the cents per Mcf sold for outside service is five and thirty-hundredths cents and for inside sales six and twelve-hundredths and for the two combined, it is five point sixty-three hundredths.

Q. That is shown on Schedule 3? A. That is right.

Q. And those are the ones that are reflected in that first column on Schedule 1? A. That is right.

* * *

[150]

W. S. ETCHIESON

was called as a witness, and having been first duly sworn, was examined and testified as follows:

BLEED THROUGH

BLURRED COPY

Direct Examination by Mr. McAllister

Q. What is your full name, Mr. Etchieson? A. W. S. Etchieson.

Q. I believe you are employed by the Phillips Petroleum Company, Mr. Etchieson? A. I am, yes, sir.

Q. In what capacity? A. As gas superintendent.

Q. With headquarters at what point? A. Phillips, Texas.

Q. At Phillips, Texas? A. Yes.

Q. How long have you been with the Phillips Petroleum Company? A. Approximately 16 years.

Q. And during most of that time have you been engaged in work for Phillips in relation to the operation of its gas properties? A. I have, yes, sir.

[151]

Q. Will you state for the record what the general scope of your work embraces? A. Well, my work consists of the operation of our gathering systems and the testing of gas for both potential and hydrocarbon content.

Q. Do you have supervision over all of the producing area that Phillips Petroleum operates in the Panhandle-Hugoton Field? A. Yes, sir.

Q. Does your supervision extend down into Permian Basin? A. No, sir, it does not.

Q. How far do you go in your supervision and where does it end in that direction? A. My supervision ends in Hartley County, which, I believe, is the nearest county to the area you are speaking of.

Q. Your supervision would extend over the areas in which the Sherman plant is located? A. Yes, sir.

Q. The Hansford plant? A. That is correct.

Q. And Borger plant? A. We do not have a plant named Borger plant.

Q. I mean the Borger area, then.

[152]

A. Yes, sir.

Q. That is the Rock Creek plant down in there? A. Yes, sir, that is one of the plants.

Q. It extends over the Stratford area in Moore County? A. We speak of the Stratford area as being in Sherman County.

Q. In Sherman County. Some of the wells are over in Moore County? A. Yes, sir. We have wells in Moore county.

Q. That are connected with that acreage in what is called the Stratford area? A. I believe that is correct, yes, sir.

* * *

[170]

Q. So that the gas out of the Area "A" acreage enters a 24-inch line that extends almost due east or at right angles to the line, the 24-inch line, that goes down towards or past the Cactus Fertilizer plant, is that right? A. The connection from Area "A" to the Sherman gathering system is at a point north of the Cactus plant.

* * *

BLEED THROUGH

BLURRED COPY

[173]

Q. Do you report the volume of gas into the Sherman Plant each day? A. Yes, sir.

Q. And do you report the volume of gas from the Area A Acreage into the general Sherman system? A. Yes, sir.

Q. That gas that is delivered out of the Area A Acreage cannot go anyplace except to the Sherman Plant. A. That is correct.

* * *

[176]

Q. The Hansford Gas Plant to which gas is delivered to Panhandle is located, you might say, substantially adjacent to the Sherman Plant; isn't that right? A. That is correct.

Q. And the largest delivery that you make to Panhandle is through the Sherman Plant rather than the Sneed Plant; isn't that right? A. The largest delivery that is made to Panhandle Eastern is through the Hansford Plant.

Q. And at the Hansford Plant, how many meters are there located at the input side of that plant to measure the gas coming into the Hansford Plant for processing? A. We do not have master meters on the intake of the Hansford Plant.

Q. You do not? A. No, sir.

Q. Are there any meters from the lines leading into the

[177]

plant at locations which substantially give you the same readings that you would obtain if the meters were located

at the plant location, the plant site? A. I am sure that there are meters on the absorbers at Hansford Plant.

Q. The meters on the absorbers at the Hansford Plant? A. Yes, sir.

Q. And those meters give you substantially the readings that you would obtain had the meters been located as the gas entered the plant? A. They give you a rough estimate of the amount of gas that is delivered into the plant.

Q. Why do you say "a rough estimate"? Wouldn't they give you a fairly accurate estimate? What process takes place before that location? A. If my memory is correct on those meters at the Hansford Plant they are on the discharge side of the absorbers.

Q. The discharge side of the absorbers. A. Yes.

Q. Are there any other meters located at the outlet side of the plant as the gas leads away to the plant to the Panhandle facilities? A. Yes, sir, all the gas is measured on the discharge of the plant as it is delivered to Panhandle Eastern.

Q. Where are those meters located in relation to the

[178]

plant? What is the distance from the plant, or where are the pipes or lines connected leading away from the plant? A. Those meters are located approximately 100 yards from the absorbers at Hansford Plant and are located right near the fence line.

Q. Does Panhandle maintain any meters at that location? A. They do not.

BLEED THROUGH

BLURRED COPY

Q. In other words. the gas delivered by Phillips to Panhandle through the Hansford Plant is measured by the meters that you have just referred to? A. That is correct.

* * *

[184]

Q. I am talking about the flow of gas out of that 22-inch line of Panhandle. All of that gas, the gas from the 27 wells, as well as the gas belonging to Panhandle that is in that 22-inch line comes into your Sneed gasoline plant; is that right? A. It first comes to Panhandle Eastern's compressor station, and then they compress the gas up to approximately 500 pounds for delivery to our Sneed Plant for processing.

Q. I see. Then it goes through Panhandle's compressor station and then out of that into your absorbers, and then back into the continuing line of Panhandle. A. That is right.

* * *

[185]

Q. The acreage, the wells, the lines, and so on, going into the Hansford Plant represent a very close net unit of operation, do they not? There is not any mingling of that gas with any other gas or the introduction of any other gas into that operation as the usual course of operation? A. At the Hansford Plant all the gas delivered into

[186]

that gathering system is delivered to Panhandle Eastern.

* * *

[225]

MASON G. WALTERS

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. McAllister

* * *

[226]

Q. In what capacity are you employed by the Federal Power Commission? A. I am employed as a natural gas engineer in the Division of Rates.

Q. I believe you are a graduate engineer and geologist? A. That is correct; from the University of Pittsburgh.

* * *

[250]

Q. With reference to Exhibit No. 2, Mr. Walters, will you tell us the source from which the information was obtained and whether it was prepared by you? A. The map and Exhibit No. 2 was prepared by me based on the other diagrams that cover this area which has recently been entered as Exhibits 12, 13 and so forth. The purpose of making this map was to show the operations in the Panhandle of Texas in a convenient form. The general pipe line system is shown, and from this sketch one can note the operations in a ready manner.

Q. In the first place, it shows the relative geographic

BLEED THROUGH

BLURRED COPY

[251]

locations of various plants. A. That is correct.

Q. Gasoline plants in which gas is delivered to the companies as supplied by Phillips as shown on Exhibit No. 1; isn't that right? A. That is right.

Q. Generally speaking, it shows the major lines indicated on Exhibits 12, 13, 14 and 15, although not all of the lines shown on those exhibits; isn't that right? A. That is correct.

Q. Was there anything else on here that is not on Exhibits 12, 13, 14 and 15 other than the difference in the legend? A. There is nothing on this sketch that is not shown on those sketches outside of the legend.

Q. This map, however, does not contain all of the detailed lines that are shown on Exhibits 12, 13, 14 and 15? A. That is correct.

Q. Is there anything on this map that is not on Exhibits 12, 13, 14 and 15? How about the Borger system? A. That is right; from the Sneed Plant east to the Northern Natural Gas Company Pipe Line, the area between — or rather, from the east line of Moore County to the Northern Natural Gas Company plant running north and south, that part in there has been added in order to tie the Gray Plant area into

[252]

the Moore County area, and so forth.

Q. With respect to that was the detail that is supplied in that area which lies between the points that you have described obtained from maps and drawings supplied to you by Phillips Petroleum Company? A. That was obtained

from maps supplied to me by Phillips Petroleum Company, that is right.

Q. And in the same general way, was it your effort to put in here the general lines and to fill in that area in the same manner in which the general lines are shown in the other areas represented by Exhibits 12, 13, 14 and 15? A. Yes, sir.

Q. From your knowledge and study of the maps that were supplied to you, does this clearly reflect to the extent that the lines are shown, the relative location and lines of Phillips' operations in this area? A. It does.

MR. McALLISTER: I offer Exhibit No. 2 in evidence, Mr. Examiner.

MR. SPARKS: I would like to ask the witness some questions.

* * *

[259]

MR. SPARKS: Then the most you could say for Exhibit No. 2 is that it is a representation of a portion, and in some areas a relatively small portion of the Phillips field lines?

THE WITNESS: I would say that Exhibit No. 2 was made in order to show the general operations of Phillips in that Panhandle area.

MR. SPARKS: Did you intentionally omit any lines from Exhibit 2 which appear on Exhibit 15, the Pampa area, because they carried casinghead gas as distinguished from dry gas?

THE WITNESS: That was not the reason for omitting those lines, no.

* * *

BLEED THROUGH

BLURRED COPY

[260]

MR. SPARKS: If the Court please, we wish to object to Exhibit 2 as not being a fair representation of what it purports to represent. It is stated to be a diagram of the pipe line facilities used to supply natural gas to El Paso Natural Gas Company at Dumas Plant, Northern Natural Gas Company and Independent Natural Gas Company at Gray Plant, and Skellytown, Panhandle Eastern Pipe Line Company at Sneed Plant and at Hansford Plant, and Michigan-Wisconsin Pipe Line Company at Sherman Plant, and since it clearly appears that it does not represent what it purports to represent, we object to it, and ask that it not be admitted in evidence. I think it is clearly shown that it is so deficient as to have no relevancy or materiality to the proceeding.

MR. McALLISTER: Mr. Examiner, I think the exhibit clearly

[261]

shows that it is, as the witness says, a general reproduction of lines connecting the various plants in relative geographic locations so that by looking at Exhibit No. 2, and by reference to Exhibits 12, 13, 14 and 15, a full and complete picture is given. It only purports to be the general line tying together those various plants and locations as described by the witness. There has been nothing omitted. It was prepared deliberately as it is shown.

PRESIDING EXAMINER: It seems to me that it is competent evidence. It seems to me that it is relevant and material. The weight of the testimony, of course, that is a

different question. Whether the witness has correctly set out the detail, whether the details are complete, of course, that is a different proposition. It does not seem to me that that would go to the relevance of the evidence or its materiality, except to the extent that the weight, perhaps, would be lessened, if it is established that there are errors or inconsistencies, or the map in the final analysis is incomplete.

The objection is overruled.

Does anyone else have any objection to this exhibit?

(No response.)

PRESIDING EXAMINER: Exhibit No. 2 is received in evidence.

* * *

[265]

W. S. ETCHIESON

a witness recalled after having been first duly sworn, was examined and testified further as follows:

Direct Examination by Mr. McAllister

* * *

[292]

Q. What other lines would be required in that area in order that you might deliver out of that area into the

[293]

Dumas plant the full one hundred sixty-five million which would be the normal delivery through that plant to El Paso?

BLEED THROUGH

BLURRED COPY

A. It would require no other lines other than the ones that we have in our system to deliver the full one hundred sixty-five million.

Q. Out of this area to the southwest of the Dumas plant? A. Yes, sir.

Q. I mean you can do that today, then? A. We can do that today, yes, sir.

Q. Now, just northeast of the Dumas plant there is a figure 20 there. Is that also a 24-inch line in that vicinity? A. No, sir. That is a 20-inch line in that vicinity.

Q. That is a 20-inch line in that vicinity. Under normal operations does that line feed gas into the Dumas plant? A. It is pretty hard to say or determine what normal operations are in a system of the size we are trying to operate out there, but gas is fed into the Dumas plant through that 20-inch. It is also fed in from the 24 that extends east of Dumas plant, and also from the 30- and 24-inch lines from the southwest.

Q. Yes. A. It depends on what our operating difficulties are in

[294]

the entire field.

Q. Yes. Well, then, under such conditions the gas in that 24-inch line indicated as a G line there might flow westwardly into the Dumas plant or eastwardly over the Rock Creek plant? A. That is absolutely correct.

Q. I mean it is just the conditions in the system which indicate which way that gas is going to flow, depending upon the required deliveries to the—well, the required deliveries to satisfy requirements out of the various plants? A. Yes, sir.

Q. On this map, Exhibit 14, the line D, there is shown a 24-inch line drawn in ink just south of that dotted line indicating the division between the Hugoton and Panhandle Fields, that 24-inch line tying the D line over to the Line A-8-3. That is a new line, new connection, that has been recently put in there or a new line— A. (Interrupting.) That is a new line compared with this greater part of the other Borger system.

Q. Yes. And then there are some lines there with a spiral over them indicating that they have been removed. Those lines have been taken out, have they? A. Those lines have been salvaged.

Q. Been salvaged, taken out, and there is no longer lines leading across there?

[295]

A. No, sir.

Q. That 24-inch tie across from the D line to the 16-inch line, 12, 16 and 20-inch, indicated by the symbol A-8-3, that 24-inch line was probably laid when there was a large volume of gas coming out of the Area A acreage is that right? The 24-inch line wouldn't be required in there today for the flow of gas out of that, except for the flexibility that you speak of when you might want to take gas under an emergency situation out of the area A? A. It may not be required today and tomorrow we may need it.

Q. Tomorrow you may need it, yes, sir. Have there been any other material changes in there? Would that gas, if you were taking a large volume of gas out of Area A, as you say, when some necessity might arise, would that flow

BLEED THROUGH
BLURRED COPY

through connecting lines over there to what is known as the Carbon line or just what would be the normal route of that line? A. Well, we have various routes, if you will notice on Exhibit 14.

Q. Yes. A. That gas may go in several different directions in finding its way to the markets.

Q. Yes. Your experience has shown that it will flow through there in what volume?

[296]

A. Through this particular 24-inch pipe line?

Q. Yes. A. I don't know, for the reason that that depends upon the pressure that we may hold at the point that the line intersects with this 12-, 16- and 20-inch, and also the pressure that we might be able to maintain at the entrance to that 24-inch pipe line.

Q. In other words, is the pressure from the wells in the Area A generally higher than from the wells in this area here— A. (Interrupting.) The shut-in pressure in the only wells in the Area A acreage are generally higher than wells in the Borger system.

[297]

Q. So that if you held the volume down you could make it out of production from all the wells in there. If you got the pressure in the lines to which the A acreage gas fed too high, it would just blanket out production from the wells, or at least reduce the volume produced. A. If you would shut in the entire system, the entire Borger system, and leave the wells in Area A producing, they would soon

start a back-flow into the wells connected along the line to the Borger area system.

Q. In your day-to-day operations, what would be the volume of gas flowing in that 24-inch line designated as A line in the vicinity of Sneed plant? A. When you say "day-to-day" it is pretty rough for me to estimate just how much gas does pass from day to day through that pipe line.

Q. You do have a rather definite volume into the Sneed plant for delivery to Panhandle; that is right, is it not? A. Yes, sir.

Q. And that would come off of the A line in normal operation? A. Well, those two 24-inch pipe lines at the point that the delivery is made to Sneed plant are all manifold together with valves, and we deliver gas from the 24 from the west, gas from the 24-inch line designated as G, and also A. There may be times, it may happen today, that the boys will have to

[298]

switch so that we will be supplying gas to Sneed plant from either of those lines.

Q. Would it sometimes happen that the gas would flow northwardly through the A or G lines from down in the vicinity of the Rock Creek plant? I mean, does the flow reverse itself in those A and G lines there along the point where you see the arrow pointing to the southwest, to Rock Creek plant? Would the flow in those A and G lines sometimes reverse itself? A. Absolutely.

Q. It does? I mean, in other words, either in the A or G lines from the southwest might be bringing gas up there

BLEED THROUGH

BLURRED COPY

to the Sneed plant, and also across the G line over to the Dumas plant. A. In fact, only last week I recall an operation where it was necessary that we do just that.

Q. Bring the gas from that area down around the Rock Creek plant of the A and G lines through the Sneed plant and across the G line over to the Dumas plant? A. Correct.

PRESIDING EXAMINER: I believe you mentioned southwest a couple of times. I think you meant southeast.

MR. McALLISTER: I did say southwest and I meant southeast. I seem to have that mixed up. Thank you, Mr. Examiner.

By Mr. McAllister

Q. That gas that comes up the A and G lines from the

[299]

vicinity of the Rock Creek plant — do you have Exhibit 2 there before you? A. Yes, sir.

Q. That would be the area down in there around the Sanford plant to the Borger plant and Pantex plant. I am not talking particularly about the plant, but the gas produced in that area would move up the A and G lines, as you have indicated. A. Yes, sir.

Q. This system which you call the Borger system, that is the most complicated system that you have to operate? A. Well, I would not say that. They are all complicated, from an operating standpoint.

Q. Do you have Exhibit 14-A before you?

This is sort of a plant layout, and if you are not familiar with it — I do not want to question you about it. You did say yesterday, I believe, that the gas which you deliver to Panhandle at Sneed goes into their compressor station and then back through your absorbers and then out of the absorbers back into the Panhandle system. A. Gas that we deliver to Panhandle Eastern first goes through our compressor station and is boosted up to approximately 300 pounds and delivered to the intake of Panhandle Eastern's compressors. They then compress it up to around 500 pounds and return it to us for processing.

[300]

Q. Through your own absorbers, and then back into their line? A. Yes, sir.

Q. Would that indicate about how it is handled without in any way trying to indicate by that diagram the exact location of the different facilities as are shown on there?

A. This drawing of our junction where the connection comes off our of our pipe line delivering gas to our Sneed compressors is not quite correct as to detail.

Q. It is a general plan, or does it indicate the manner in which the operations between Panhandle and Phillips are undertaken? This is a general plan, is it not? A. Yes, sir, I believe it is.

Q. And you said Mr. Parish— A. A. W. Paris.

Q. —would be the one who would have supervision over the detailed operations of these plants? A. Yes, sir.

Q. Do you recall in recent months a necessity arising for the delivery of gas out of the Area A acreage into the Borger system? A. No, sir, not recently.

BLEED THROUGH

BLURRED COPY

Q. How long is it since there has been any gas delivered down that way? A. I don't know. I would have to check the records to

[301]

see.

Q. It was quite some time? Within the last year, say, do you have any recollection of gas being delivered down that way? A. I do not have a recollection to the point where we delivered gas from Area A to that system . I know that we have, so I would just have to check our records to see.

Q. Would you do that for me? A. Yes, sir.

Q. If the gas were delivered out of that Area A acreage, would it be metered at any point to determine the exact volume coming out of Area A? A. There is a meter at each individual well, and there are also meters on various tie-overs out of Area A into the Sherman system, and by deduction we could determine fairly accurately the volume.

Q. That is how you would determine the volume of gas flowing into the Borger system out of that area? A. Yes, sir.

Q. As long as the valve is closed southward out of the area, you do not have that problem, but you would know when you opened the valve that then there would be some gas flowing that way. A. Yes, sir.

Mr. McAllister, I might add a little to that last statement.

[302]

If that valve was open today there would be gas from that Area A acreage flowing into the Borger system, but it may

be that our operations would be such that when we opened that valve it would flow in that opposite direction.

Q. It just depends on the pressures in that line and how you were producing? A. Yes, sir.

* * *

[306]

Q. Is there any way that you could describe on the record the mode of operation that you follow which indicates or points to you the necessity of changing the production in one area in favor of another, switching the gas, you might say, from one area to another? Just how does that come about? A. When it becomes necessary for us to switch gas from one area to the other or to decrease the volume in one area and raise the volume in another area, in order to maintain our deliveries, we dispatch men to both areas. Their automobiles are equipped with radios and they at all times are in communication with each other. A man in one area knows what the man in the other area is doing at all times.

Q. In other words, when he cuts in or cuts down one well, then the other man opens up some other wells, why, that enables you to gauge the flow and determine whether or not that would permit you to maintain the total over-all volume of gas to meet, as you call it, the market requirements? A. Yes, sir, that is right.

[307]

Q. What was the situation, I think you mentioned it as having occurred last week, in gas produced down in and around the Rock Creek plant, the Pantex plant and the

BLEED THROUGH

BLURRED COPY

Sanford plant? I just use those names to indicate the area, produce gas there and move it up to the Sneed plant to meet Panhandle's requirements and across through the Dumas plant to meet El Paso's requirements, what was the situation that made that necessary? A. If you will notice on Exhibit 14, the pipe line designated as line A, which is the 24-inch pipe line, extending northwest from Sneed plant to a junction point there some, oh, seven or eight miles, that particular line was out of service to replace several joints of pipe, and during the period that the line was out of service it was necessary that we back flow gas.

Q. You mean by back flow, you mean from that area down around Rock Creek plant up to meet the requirements to Panhandle out of the Sneed plant? A. Yes, sir.

Q. And at that same time did some of that gas move across that line G to the Dumas plant? A. Yes, sir, it did.

Q. And through the Dumas plant to El Paso? A. Yes, sir.

Q. Was the full requirements of Panhandle during that

[308]

time supplied through the back flow of gas through the A line less whatever came off of that 22-inch line to which those 27 wells are connected? A. I'm not sure whether the full requirements was met or not, but I am reasonably sure they were in that particular case.

Q. Substantially those requirements? A. Yes, sir, and it would have to come from the area south and east of Sneed plant.

Q. And at that time what was the volume flowing

through that G line into the Dumas plant off of the A line, on what order was that? A. I just don't know.

Q. I see. Was it a substantial volume, 10 million or more, or do you know? A. No, sir, I do not know.

Q. How much advance notice did you have that that A line northwest of the Sneed plant was going to be out? A. As I recall that, we were advised of a leak on that line the day before the repairs were made.

Q. And that permitted you to arrange for the deliveries which you have described? A. Yes, sir.

Q. And the gas, you said, was moved—you regulated the flow of gas by production so that it did flow in the way

[309]

that you have mentioned? A. Yes, sir, we did.

Q. How did you accomplish that, by producing more gas in the area? A. Yes, sir, unless we were to decrease our markets in what we call the Borger area. That is the only way that we could handle a situation as we did.

Q. Yes. You didn't actually reduce your deliveries, did you, or did you? Was it a combination or do you know? A. As I recall, we made most of our deliveries during that period.

Q. By the opening up of the wells, so to speak? A. Yes, sir.

Q. On Exhibit 14, there is a 24-inch line with a symbol "C" on it. Is that what is commonly or sometimes referred to as the Carbon line? A. Yes, sir, it is.

Q. And there is one point there on the Moore County-Hutchinson County line north of the Sneed plant, there is

BLEED THROUGH

BLURRED COPY

an arrow indicating a southeasterly direction labeled "to Rock Creek". That is a 24 inch line leading all the way into the Rock Creek plant, is it not? A. No, sir. That 24-inch line as a raw gas gathering line does not extend all the way to Rock Creek.

Q. Where does it terminate?

[310]

A. It terminates as a raw gas line at what we call our Johnson plant, and from that point the gas moves through a 20-inch pipe line to the southwest and from the 20-inch into a 24-inch pipe line.

Q. That gas is destined for local deliveries, primarily, or does any of that gas find its way into interstate pipe lines? A. After the gas gets to Johnson and Rock Creek plant, I don't believe we have any sale from those plants to an interstate pipe line company.

Q. It doesn't go to Cities Service or any of those pipe lines of that character? A. No, sir.

Q. Does the gas in that line have a back flow at any time? A. I am sure that we have found it necessary to back flow gas through that line, but I don't recall any particular occasion that we have recently.

Q. When you would back flow that gas in that line, would it be to provide for the delivery of gas back through that line around through the Dumas plant to El Paso? A. It could very well be, yes, sir.

Q. That would be one use that might be made of that line if occasion arose to take the gas out of the producing area around Borger over through the Dumas plant to meet

[311]

requirements of the El Paso Natural Gas Company? A. Yes,sir. Our pipe line system is such that that could be done.

Q. And there have been occasions, as you recall it, when that was done? A. I don't recall any particular time when we have done that, but as many switches and shut-downs as we have made in that system the last 10 years that I have been at Borger, I feel reasonably sure that that has taken place.

Q. And it is an operation that you could clearly visualize if the occasion arose for the movement of gas in that fashion? A. Yes, sir.

* * *

[317]

Q. What popular names do you have assigned to these large diameter lines? Take that A line from the Sneed plant when it is going to be put out of service, when people call you up and when the repairmen said "We are going to knock out

[318]

that line tomorrow morning at 10 o'clock and replace three joints of pipe." What would be his popular name for his designation of that line? A. He would call that the 24-inch gathering line between our Moore County junction and the Sneed gasoline plant.

Q. You would define it in that way? A. Yes, sir.

Q. He would put it in the term "gathering line." A. We speak of all of our pipe line system as a gathering line.

BLEED THROUGH

BLURRED COPY

Q. I know you speak of them as a general term. A. Yes, sir.

Q. But if he were to report that to you he would say the 24-inch line, would he not, he would not put the word "gathering" in there in his advice to you, would he? It would be unusual if he did, would it not? A. No, sir, it would not.

Q. Would you have any other 24-inch line other than that in there? A. That is the only 24-inch line that we have between those two points.

Q. Then he would refer to it as a 24-inch line between those two points, would he not? A. I would say that most of our field men refer to all of the lines as the general line.

[319]

Q. I know they would refer to that, because the nomenclature, the name you assign to them, but I mean if you called a man in the field and you would say to him, "Go to the 24-inch line at such and such a point and see if it is leaking," would you be specific in telling him that there was a gathering line there, in such instructions? A. Oh, I might say our 24-inch pipe line at a certain point.

Q. Sure. Unless there is some reason for you to argue about it, you would not refer to it as anything else than a 24-inch line, a pipe line, or something like that; is that right, as general day-to-day business? A. I would say that most of the time when I refer to those lines I would call it the gathering line.

Q. Do you have any other classification, are they well lines, field lines? A. If we are talking of a connection to some particular well we would say the gathering line or

possibly the line gathering gas from some particular well, a well.

Q. You would call it well line, wouldn't you? A. I might call it both.

* * *

[325]

Q. In your day-to-day operations in talking of these lines are there not some lines that you call trunk lines? A. I usually refer to those larger lines as a main line.

Q. Or trunk line? A. Very seldom would I refer to any line as a trunk line. I usually say main line or main gathering line but never a trunk line.

Q. Isn't it a fact that you told some of our boys that you referred to them as trunk lines? Do you recall that? A. I don't recall it.

Q. You don't recall it? A. It is possible that I have referred to some of the lines as trunk lines, but it is very seldom that I do that.

Q. Do you know also of another term that you use commonly as lease lines, where a line leads off of one of those major lines into a well or onto a certain lease?

[326]

A. I usually refer to a line from one of our main lines to some particular well as the gathering line to that well.

* * *

[327]

Cross-Examination by Mr. Sparks

* * *

BLEED THROUGH

BLURRED COPY

[338]

Q. Through the various loops that you have delineated here and as appears from the map by the junctures of the various lines, may the gas flow on occasion at both directions? A. There is a point on each line where the gas, I think, flows in two directions.

Q. You mean at any one time it necessarily flows in two directions at some point on the loop? A. On occasions it almost has to be that way.

[339]

Q. Is it, therefore, possible to determine accurately as to all of the gas that is delivered to El Paso Natural Gas Company from the Dumas plant and to Panhandle Eastern Pipe Line Company at the Sneed plant, the source or wells from which all of that gas is produced? A. I wish it were possible that I could do that, but that is a problem that it would be impossible for me to solve. I cannot tell how much of the gas from any one well went to Dumas plant either through the 24 or the 20 or the 30-inch. I feel I can get fairly close to the amount of gas that is handled through one line at some given time, but over a period, why, it is pretty rough to do.

Q. You mentioned, I believe, that sometimes variations in market requirements of the purchasers occasioned variations in operations of the system. Are there other reasons why, on occasion, you have variations in the operations of the pipe line system, and therefore varying flows of gas through those loops? A. Yes, sir. I think I mentioned yesterday that in addition to the fluctuation in deliveries

to our markets, that the atmospheric temperatures had a bearing on the transportation of gas, and also the testing programs that were set out by the Railroad Commission, and our own testing program for informational purposes, line breaks, and there may be others, but I do not recall right now.

* * *

[370]

KENNETH S. ADAMS

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. McAllister

Q. Mr. Adams, what is your full name, please? A. Kenneth S. Adams.

Q. I believe you are president of the Phillips Petroleum Company? A. Yes, sir.

* * *

[407]

Q. Now I show you the annual report for 1949, Mr. Adams, and referring to Page 10, the following appears:

> "Delivery of natural gas"—no, I am going to start at the beginning at the top—"Gas sales for the hear, exclusive of company requirements were 418 billion cubic feet as compared with 391 billion cubic feet during 1948. If gas gathered and processed or consumed by the company in its various manufacturing and other

BLEED THROUGH

BLURRED COPY

operations were considered as a part of the 1949 total sales volume, this latter figure would be 550 billion cubic feet, an average of more than one and one half billion cubic feet per day. Gross income from sales to outside purchasers was 20 million 4 hundred thousand dollars, an 18 per cent increase over the 1948 income of 17 million 3 hundred thousand dollars.

[408]

"Delivery of natural gas to Michigan-Wisconsin Pipe Line Company started about the first of November, in performance of the company's contract to supply the total gas requirements of this line. This project makes gas from Texas and Oklahoma available to markets in the States of Michigan and Wisconsin. The immediate daily requirements approximate 190 million cubic feet, with expectations of an increase to 340 million cubic feet daily in the near future. Like several similar projects, this development is the outgrowth of a long-range program conceived nearly a quarter of a century ago for the acquisition of low cost natural gas reserves in the Texas Panhandle and Texas-Oklahoma Hugoton Field. The company's resources of natural gas located in these fields, the Gulf coastal area, the Permian Basin of West Texas and New Mexico and elsewhere are generally recognized as being the largest held by any company in this country."

Now, that appears under the heading natural gas on Page 10 of the annual report for 1949, which you signed and

with which you were familiar at the time you signed the report, is that right, Mr. Adams? A. Yes, sir.

Q. And as far as you know and as far as you knew then it was true and correct, the statements made therein?

[409]

A. Yes.

Q. Now I direct your attention to a title or description on Page 11 of that annual report, Mr. Adams, which shows a gasoline plant, certain piping structures—that is the picture—and under the picture this appears:

> "This West Texas gasoline plant and similar plants extract the liquid content and prepare gas for delivery to the El Paso Natural Gas Pipe Line for transmission to California. Other company plants supply natural gas to pipe lines serving Michigan, Wisconsin and other northern states."

You were familiar with that statement at the time it appeared in the annual report, were you not, Mr. Adams? A. I think I was.

Q. Well, you signed it and your stockholders and everyone else assumed it represented as being a true and full statement regarding the matters referred to, is that right? A. I would think so, yes. I don't recall it.

Q. But I correctly read the statement from the annual report? A. You did, yes, sir.

Q. And you signed that annual report? A. Yes, sir.

Q. Now we come to the 1950 annual report, Mr. Adams,

BLEED THROUGH

BLURRED COPY

[410]

and under the heading "Natural Gas" on Page 10 of the annual report, which, I believe you signed as president of Phillips Petroleum Company, did you not, Mr. Adams? A. Yes, sir.

Q. And this statement appears:

"The volume of gas sales by Phillips reached a record level in 1950. Exclusive of company requirements, sales totalled 504 billion cubic feet, an increase of 86 billion cubic feet over the previous year. Gross income from sales of gas to outside purchasers was 26 million dollars, an increase of 27 per cent over 1949. The volume of gas gathered and processed or consumed by the company in its various operations, when added to the volumes delivered to outside purchasers, totalled 630 billion cubic feet, an average of more than 1.7 billion cubic feet per day. Deliveries of natural gas to Michigan-Wisconsin Pipe Line Company were being made at the increased rate of approximately 280 million cubic feet daily at the end of the year. The sale to El Paso Natural Gas Company of an additional 30 million cubic feet of gas per day for ultimate delivery to California started during the summer from the company's West Texas and New Mexico plants, bringing the total daily deliveries to that purchaser to 395 million cubic feet.

[411]

"A contract has been consummated with Texas-Illinois Natural Gas Pipe Line Company to sell approxi-

mately 26 million cubic feet of gas daily from Phillips' reserves in the Chocolate Bayou field, Brazoria County, Texas."

MR. SPARKS: I believe it is 28, is it not, Mr. McAllister?

MR. McALLISTER: It is. Did I say something else?

MR. SPARKS: You said 26.

MR. McALLISTER: 28 is correct. "This gas will be delivered to the Chicago area by a pipe line now being constructed by the purchaser."

That statement appears in the annual report for 1950 as I read it, does it not, Mr. Adams? A. Yes, sir.

Q. And this is sufficiently near to the present time, is it not, that you can say that you do know that those statements are correct and that they were so known to you as being correct at the time you signed this annual report? A. Yes, sir.

Q. Mr. Adams, I have before me a prospectus of the Phillips Petroleum Company and the date of issue of this prospectus as shown on the bottom of the first page is August 16, 1938, and it relates to the issuance of 25 million dollars worth of Phillips Petroleum Company convertible

[412]

three per cent debentures due September 1, 1948, and on Page 42 of that document appears the signature—it is printed—Phillips Petroleum Company by K. S. Adams, presi-

BLEED THROUGH

BLURRED COPY

dent. I just want to make one point clear. This is a matter —the matter I am inquiring about is a sentence or a statement contained on Page 12, and I'll read it.

MR. SPARKS: Could I see it before you read it into the record, please?

[413]

MR. McALLISTER: The statement therein contained on page 12 is this:

> "Natural gas purchased by Independent Natural Gas Company from the company within the State of Texas is transported by that company and delivered to Northern Natural Gas Company at Skellytown wholly within the State of Texas. The company understands that upon taking title to the gas so delivered, Northern Natural Gas Company transmits this gas to points outside the State of Texas."

BY MR. McALLISTER:

Q. Whether or not you recall that statement as being in that prospectus, as being the prospectus for the issuance of securities, you were satisfied, and you knew at the time you signed it that it was a correct statement, did you not, Mr. Adams? (Handing document to witness.) A. I would not have signed it if I thought there was any mis-statement in the prospectus.

Q. And since your recollection might not now be as clear as to exactly what you had in mind then, you do know at that time you would not have signed it had it not been a true statement? A. Certainly not.

* * *

[445]

Q. I call your attention to a contract between Michigan-Wisconsin Pipe Line Company and Phillips Petroleum Company under date of the 11th day of December 1945, which has been identified in this record as Exhibit 11-A, and direct your attention to Article I, Section 3, Sub-paragraph (d). That provides, does it not, Mr. Adams, the failure of buyer, which

[446]

is Michigan-Wisconsin Pipe Line Company, to commence on or before January 1, 1948, the acceptance of deliveries of gas hereunder for delivery by buyer, which is Phillips Petroleum Company, for resale in one or more municipalities east of the Missouri River. A. That is correct.

Q. And the paragraph into which that fits begins by reading:

> "However, upon the happening of any one of the following contingencies, to-wit," then there are paragraphs a, b, c, and d which you have read.

Then the quoted part goes on:

> "Seller," which is Phillips Petroleum Company, "shall have the right to terminate this contract by written notice to be delivered to buyer not later than 30 days after the happening of such contingency."

That is what the contract says, does it not? A. Certainly.

BLEED THROUGH
BLURRED COPY

Q. By supplement agreement, which is agreement N in this record, entered into on the 16th day of October 1946, between Michigan-Wisconsin Pipe Line Company and Phillips Petroleum Company, it is provided that Article I, Section 3, Sub-paragraph (d) shall be amended by striking therefrom the date January 1, 1948, and substituting in lieu thereof the date of January 1, 1949.

[447]

That is the paragraph to which we previously referred; is that right? A. Yes.

Q. So that under the original contract as modified by this agreement of October 16, Michigan-Wisconsin was under obligation to begin taking gas for resale east of the Missouri River on or before January 1, 1949. A. That is correct.

Q. And upon failure of Michigan-Wisconsin so to do, Phillips had the right to cancel the contract by giving 30 days' notice to Michigan-Wisconsin? A. That is as I understand it.

Q. Do you now recall that on or about March 15, 1948, Michigan-Wisconsin Pipe Line Company suspended construction and did not then thereafter resume construction until about June 1, 1948? A. I don't recall that they ever stopped construction once they started. They may have.

MR. McALLISTER: I have here a letter that I propose to read into the record, Mr. Examiner.

(Document handed to Mr. Sparks.)

MR. SPARKS: No objection.

MR. McALLISTER: It is a letter on the letterhead of Michigan-Wisconsin Pipe Line Company, bearing date of

March 24, 1948. It is addressed to Mr. A. B. Hiatt, Staff Director,

[448]

Phillips Petroleum Company, Bartlesville, Oklahoma.

"Dear Mr. Hiatt:

"During your recent visit you indicated a wish to be advised of the progress of construction of the Michigan-Wisconsin pipe line. As of March 15 the laying of pipe has been suspended, although pipe fabrication and its shipment to the site will continue as previously scheduled.

"When work is resumed I will arrange for Mr. Poor of Ford, Bacon & Davis in Kansas City to advise you regularly of the progress.

"Yours very truly," signed C. T. Dickeman, Executive Vice President, with carbon copies to Mr. V. H. Kyle and Mr. W. B. Poor.

A letter of that character addressed to Mr. Hiatt and retained in the correspondence file from the Phillips Petroleum Company, the information being supplied by Michigan-Wisconsin, would indicate that there was that suspension of construction, would it not, Mr. Adams?

THE WITNESS: In accordance with the letter, yes.

BY MR. McALLISTER:

Q. Do you recall, Mr. Adams, in the early part of June 1948 you had a conference in New York with Mr. William G. Woolfolk of the Michigan-Wisconsin Pipe Line Company, wherein you discussed with him the further extension of time

BLEED THROUGH

BLURRED COPY

[449]

beyond January 1, 1949 as the time when Michigan-Wisconsin was obligated to begin taking gas from Phillips for resale by Michigan-Wisconsin east of the Missouri River? A. I recall that I had a conference with Mr. Woolfolk in New York. I do not recall the exact time of the conference.

* * *

[450]

Q. Do you recall having a conference at a later date in July with Mr. Woolfolk in Kansas City? A. Yes, sir.

Q. Wherein the question of the extension of the deadline or the date upon which they would be required to begin taking gas was discussed? A. Yes, sir.

Q. And in that conference you were accompanied by Mr. Don Emery, general counsel of Phillips Petroleum Company; isn't that right? A. Yes. We had one other man with us, and I believe it was Mr. Rippel, but I am not sure. I believe it was. We could find out very easily.

Q. Can you find out by asking him here now. I do not have it, and I would like to know. A. Surely.

MR. SPARKS: Is he here?

THE WITNESS: It was not Mr. Rippel, it was Mr. Hiatt. I knew I had somebody there with me because I could not get myself along with that crowd without having lots of help.

BY MR. McALLISTER:

Q. In addition to Mr. Woolfolk, there was Mr. John Durn

[451]

of Michigan-Wisconsin, do you remember that? A. He had a man or two with him and I just do not remember who they were. I never met them before.

Q. Mr. H. B. Munsell and Mr. Thomas K. Humphrey, general counsel for United Light and Railway Service Company. A. I remember the latter two men being there. The other gentlemen I do not recall.

* * *

Q. And the one principal point that was involved in the discussion at that conference was the extension of the date that we have been discussing; isn't that true? A. No, not as I recall. The main thing that they were after, as I recall, was more gas, more gas reserves. I think at the same time we discussed an extension of the contract, and I do not know whether or not we extended the contract at that particular time. I would have to refer to the contract as it was written, as far as starting to take gas is concerned.

Q. The contract was changed, let us put it that way, or amended, whatever you want to call it, as the result of that conference, or following the conference, let us put it that way,

[452]

because I presume there were other negotiations also; isn't that right? A. Yes, we discussed the additional sale of gas.

Q. To go all the way on it, the price, the volume, the dates of delivery? A. The latter two — the date of delivery is the only one of the three that I am confused on in my

BLEED THROUGH

BLURRED COPY

own thinking. I just do not recall. There have been so many amendments, I just do not recall the exact date.

Q. I show you a contract between Michigan-Wisconsin Pipe Line Company and the Phillips Petroleum Company, bearing date of August 9, 1948, and marked for identification in this record as Exhibit 11-O. I wish you would look at that, Mr. Adams, and satisfy yourself that that is the contract that you have in mind which embodies the matters discussed or agreed upon at this conference in Kansas City.

* * *

[453]

THE WITNESS: I am down to two of them. I see that we gave more gas acreage, we extended the time from January 1, 1949 to July 1, 1949, that they had to start taking gas. Also the commitments of the volumes of gas they had to take was extended. Next is the price provision which was changed. Those are the three that I recall.

BY MR. McALLISTER:

Q. The price was increased in that contract? A. The base price, as I understand, was increased in the contract.

* * *

[455]

Q. Mr. Adams, during the course of your testimony

[456]

on Friday of last week, reference was made to a certain conference which you had with Mr. Woolfolk of the Michigan-Wisconsin Company in New York and later in Kansas City, regarding the renegotiation of a contract between

Phillips and Michigan-Wisconsin for the supply of a volume of gas for a pipe line which at the time of the conference was under construction. I am not sure that this fact was made plain on the record, but it is a fact, is it not, that at the conference in New York he related to you their predicament due to shortage of steel and what-not, and their fear that they would not be able to meet the deadlines in that contract of December 11, 1945, with Phillips, which is Exhibit 11A in this record. Is that a fact? He did set those facts out and stated to you, did he not, that he was apprehensive of their ability to meet those deadlines? A. Yes. As I recall, that conversation occurred.

Q. And he also advised you that he was desirous of having the contract modified by extending the time within which certain particular specified conditions were to be met by Michigan-Wisconsin? A. Yes, I think he covered that subject matter in that conference that we had in New York.

Q. Do you have any recollection at this time of the miles of pipe which Michigan-Wisconsin had laid during the period up to and through July preceding the execution of the

[457]

contract or the amended contract on August 9, 1948? A. I don't have in mind the exact miles. However, I recall our men in our gas division so advised me that in their best judgment they were going to be able to comply with their contract requirements as far as construction of the line was concerned.

BLEED THROUGH

BLURRED COPY

Q. But Mr. Woolfolk and the Michigan-Wisconsin people were not at all certain of that and they didn't want to be faced with the possibility of missing the deadline and losing their contract, isn't that true? A. I think they were more disturbed over it, naturally, than we were.

Q. Would it refresh your recollection any to say that the Michigan-Wisconsin people in a proceeding before the Securities and Exchange Commission showed that as of July 30 of 1948 they had 160 miles of line completed? A. No. This is the first time that I knew that—

Q. (Interrupting.) That any figure of that kind—
A. (Interrupting.) That is correct.

* * *

[466]

MR. McALLISTER: Just to tie it in a wee bit closer, Mr. Examiner, the contract of August 9, 1948, which is Exhibit 11-0 in this record, in paragraph five it has this to say:

> "It is understood the construction program of the pipe line described in said contract, dated December 11, 1945, may not permit Michigan-Wisconsin to commence the acceptance of deliveries of gas under said contract by the date specified in sub-section (d) of section 3 of Article I of said contract as amended, namely, January 1, 1945, or to accept deliveries of volumes of gas under said contract, as amended, October 16, 1946. In order to afford Michigan-Wisconsin relief in this respect, it is hereby agreed between the parties hereto that"—and the contract goes on to provide for the

changes that I have mentioned with respect to the provisions of the Power contracts relating to deadlines.

* * *

[467]

MR. McALLISTER: May I read the document into the record, Mr. Examiner?

PRESIDING EXAMINER: Yes.

The objection is overruled.

MR. McALLISTER: The heading is:

"In the Matter of Application Number 2 in Response to the Commission's Order of December 30, 1947 The United Light and Power Company, et al. (File Nos. 59-11, 59-17, 5 -25)

"Exhibit E."

"1. State the number of miles of pipe in the ground at July 30, 1948.

"160 miles.

"2. State the number of miles of pipe on the right-of-way or at a contiguous railhead.

"96 miles.

"3. State the approximate date when construction was resumed following the shut-down in the first quarter of 1948.

"June 1, 1948.

BLEED THROUGH

BLURRED COPY

[468]

"State the approximate present rate of construction.

"While the daily rate of construction varies and has recently exceeded the average figure, the management estimates that construction will proceed at an average rate of three miles per day."

Upon this appears in the stamp of the Securities & Exchange Commission:

"U. S. Securities & Exchange Commission, received August 4, 1948, 4th Mail, Docket, Mail & Files."

The stamp on the lower left-hand corner:

"Docket No. 54-25, Exhibit No. E, Respondent's, In the matter of The United Light & Power Co., Date, 7/28/48, Witness.....Reporter....."

I have examined the testimony in that case, and I note that on that date, July 28, 1948, Mr. Woolfolk did testify, and this Exhibit E designation was reserved for a document upon which he was to supply certain specified information. I think this is all of the information he was asked to supply. I have not checked that.

[469]

MR. SPARKS: May I ask counsel if the record there showed the distance from the beginning point of the pipe line in Texas to Maryville, Missouri?

* * *

[470]

MR. McALLISTER: We have a note in one of our records here of 455.5 miles. That is to Maryville.

MR. SPARKS: That is right.

MR. McALLISTER: And Maryville, I think, has been accepted and recognized by all parties as the first municipality east of the Missouri River along the route of the Michigan-Wisconsin Pipe Line where it would be possible for Michigan-Wisconsin Pipe Line, after constructing its pipe, to deliver gas for resale to the public.

MR. SPARKS: East of the Missouri.

MR. McALLISTER: East of the Missouri River.

MR. SPARKS: That is correct.

MR. McALLISTER: And that was the specification in the contract of December 11, 1945, between Phillips and Michigan-Wisconsin.

MR. SPARKS: That is correct.

PRESIDING EXAMINER: That is Maryville, Missouri, isn't it?

MR. McALLISTER: Maryville, Missouri.

Mr. Sparks, we have a problem of proving some of these documents that were supplied from the records of Phillips. It is not a difficulty but it is merely working out a

[471]

reasonable way to do it. This exhibit 21, we put in certain excerpts from the minutes of the board of directors, and I am wondering if it is going to be necessary for me to show that that was supplied by Phillips.

BLEED THROUGH

BLURRED COPY

MR. SPARKS: No, sir, it will not. We will not agree to the admissibility of it, but—

MR. McALLISTER (interrupting): But it is a true copy of the minutes insofar as they are reproduced.

MR. SPARKS: Correct.

MR. McALLISTER: I am going to offer that Exhibit 21 at this time, Mr. Examiner, because I propose to ask Mr. Adams certain questions regarding it.

MR. SPARKS: If the Examiner has the exhibit before him—

PRESIDING EXAMINER: Yes, I do.

MR. SPARKS: You notice that the first page of the exhibit merely recites the place at which the meeting of the board of directors was held and the parties present and that prior minutes were reviewed.

The second and third pages of the exhibit relate to a report made by the president of negotiations of certain amendments to the gas sales contract with Michigan-Wisconsin. It is short and obviously it, on its face, relates to nothing more than rates and to a report of an estimated increased income to the company over the life of the contract as a result

[472]

of the amendment.

We object to it because it does not have any relevancy or materiality to the jurisdiction of the Federal Power Commission, and, as a matter of fact, I don't think it has any relevancy if we were hearing also the rate issue, because it does not purport to reflect any past expenses, cost, profits or otherwise.

MR. McALLISTER: Well, Mr. Examiner, it is merely part and parcel of the line of factual proof relating to the position of Phillips Petroleum Company in bringing about the modification of the contract.

Of course, you can't try a jurisdictional case without having facts and figures. You'll have dollar signs and feet and miles and Mcf and everything else in the documents which relate vitally to the matters which bear upon questions of jurisdiction.

* * *

[505]

Q. As a matter of fact, Mr. Adams, the price that you obtained in the contract of August 9, 1948, the contract with Michigan-Wisconsin, specified the highest contract price for natural gas than had ever been realized by Phillips in any contract for a supply of gas for an interstate pipe line; isn't that true? A. It might have been, as far as Phillips is concerned. However, we had an original contract, as I recall, with the Michigan-Wisconsin Pipe Line Company that we made in 1945. I do not have the exact figures, but I think the escalation price in July 1948, when the negotiations were carried on in Kansas City, was practically equal to the base price of 7.5 cents that we secured in the contract.

Q. You set that as the base price and included the escalation clauses to go on. A. At that conference we set the base price just about what the escalated price was, as I recall, and sold them gas from 40 or 50,000 acres—I believe we got the same price provision. I believe we had a base price of 7-1/2 and a top of 8-1/2 for the first five-year

BLEED THROUGH

BLURRED COPY

period. I am not exactly correct on those figures, but fairly close.

Q. The base price was 7-1/2, and it was generally accepted that that meant 8-1/2 cents as of that date? A. I think that is fairly close.

Q. Are you talking about 40 or 50,000 acres added—

[506]

A. Additional.

Q. Of that 40 or 50,000 acres added there were 28,000 acres, were there not, that were omitted in error in the original contract? A. That I am not in a position to say, I would not know.

Q. Well, I do not want to go into that. I will ask some of the others. I think it was shown before the Federal Power Commission that though there were some 40 or 50,000 acres more enumerated in the Appendix A to the contract than was enumerated in the Appendix A of the original contract, it was pointed out that of that total additional acreage some 28,000 was omitted in the original contract through error. A. That may be true, because I recall—

Q. I do not know, it was not important. In the second contract it was in—it was not in the second contract—whether or not there was additional acreage, whether it was merely a correction of an error. I will ask someone else. A. I was under the impression that was additional acreage. At least I recall—

Q. It was additional acreage technically. A. The thing that was worrying Mr. Woolfolk most in any of the nego-

tiations that I had with him is "where am I going to get some additional gas reserves?"

Q. Do you have any idea how many acres were embodied in the first contract?

[507]

A. Acres? No, I don't recall acres, but I think we dedicated close to around what we estimated to be around three trillion cubic feet of gas reserves, three to four trillion.

Q. Three trillion I think was close. The acres, as I have noted them in one of the exhibits that has been marked for identification, show 647,000 acres. A. Getting back on this—

Q. Let me finish this point—647,000 acres. A. Are you asking me if that was the figure?

Q. I mean if it is, 40,000 is a relatively small percentage of added gas. A. That is 10 per cent, it is awfully close, a little less than that.

Q. Around 7 per cent, is it not? A. Well, 7 per cent.

* * *

[645]

W. S. ETCHIESON

resumed the stand, and having been previously duly sworn, was examined and testified further as follows:

[646]

Direct Examination (Resumed) by Mr. McAllister

* * *

BLEED THROUGH

BLURRED COPY

[657]

Q. I think that was another question. I think I did ask you that. At one point I know I asked you that. That was Page 283, and that was to check whether there were lines from wells located in the State of Oklahoma tying into Line H between the location of the future site of Sherman booster station into the Sherman plant. If you have that, I'll take that. We can take that up here. A. There are no lines connecting to Line H between the future site of Sherman booster station and the Sherman plant.

[658]

Q. Either from wells located in the State of Texas or in the State of Oklahoma? A. That is right.

* * *

[734]

Q. Let's get at it this way, then, as far as the Sherman plant is concerned, do you have frequent changes in the mode of operation that is required in order to produce the required volumes of gas through that Sherman plant for Michigan-Wisconsin? A. We make various changes.

Q. I mean important changes. Small ones, yes, sir, but I mean changes that materially affect the volume of gas going through the plant. A. Yes, sir, we do.

Q. And that would range in volume from a maximum down to a minimum of what? Let's take in the year 1950, if that is not too large an order for you. If it is in any of these questions, well, say I can't give it to you for that long a period but I can give it to you for this month or a

shorter period. A. Let me try to answer that in this way, the compressors at Michigan-Wisconsin handle approximately 25 to 30 million feet each, depending on the pressure. Very often during the day and night, they start up an engine or they take an engine off the line. When that happens, it affects our gathering system by that volume that the engine is handling. It is necessary that we go switch the gas either out or in, depending on whether they are starting up or taking off engines.

[735]

Q. You mean out or in, you mean at the well? A. Yes, sir. We have line breaks, as I have mentioned in my testimony. In a system of that size you are going to have a number of those each month.

Q. When that occurs you have to make up the gas out of some other well? A. That is right. Testing programs, I mentioned that. There may be others that I do not recall right at this time.

Q. And each one of those requires some change by cutting in or taking out from the lines some particular well or wells? A. Yes, sir, it requires a switching of gas some place.

Q. Within that system, is it sometimes necessary to take gas from what you have been calling some of your other systems to make up, or is that done very often? A. In the Sherman system we have not taken any gas from any other system since November 1, 1949, I'm sure.

Q. Would the converse of that be true, you have not during that same period switched any of the gas out of

BLEED THROUGH

BLURRED COPY

that Sherman system to one of your other systems during that period? A. That is correct.

Q. Would the same be true of the Hansford system,

[736]

except for a longer period of time probably? A. We have never delivered any gas from the Hansford system to any other system or have we received any gas into the Hansford system from any other system.

Q. When you actually cut the wells off, why, that was an entirely different major operation where you just were changing the component parts of the system? I mean when you took the wells in that southern tier of the Sherman system off, or off the Hansford system. A. Well, those wells were disconnected from the Hansford system—

Q. (Interrupting.) I mean that was a major operation and not the switching we have been talking about. A. That required the laying and connection of pipe lines.

Q. And these changes on the gas delivered through the Sherman plant and your operation of the wells that you have gauged to meet Michigan-Wisconsin's? A. Yes, sir.

Q. I mean the amount of gas that they can take or require in any day or any hour determines what you propose to produce from the various wells in that system? A. Yes, sir.

Q. Is that true in the Hansford system as well? A. That is correct.

[737]

Q. And those are the two most closely-knit systems that you have, are they not, under your supervision? A. I

believe those are the only two systems that are what I consider a closed system, and the Michigan-Wisconsin is dependent entirely upon the delivery from Phillips from the Sherman gathering system and Panhandle Eastern is depending upon the volume they receive from the Hansford plant from the Hansford gathering system only.

Q. The deliveries to Independent Natural Gas Company down through the Gray plant is somewhat similar but not nearly as tight as those two, isn't that true? A. Well, all the gas we deliver to Independent Natural Gas Company is delivered from our Gray gasoline plant.

Q. And are there deliveries of gas out of the Gray plant to others than Independent for Northern? A. Yes, sir. There are other deliveries from Gray plant.

Q. Local deliveries primarily? A. Yes, sir.

Q. I mean gas that is for, you might say, consumption in that relative area? A. Yes, sir.

* * *

[744]

Cross Examination by Mr. Sparks

* * *

[746]

Q. I would like for you to turn to Exhibit 15. That is a map which purports to reflect the Phillips pipe line in Gray, Wheeler and a small portion of Carson County, Texas, is that correct? A. That is correct.

Q. At the lower left-hand side of the map there are a

BLEED THROUGH

BLURRED COPY

[747]

number of lines which come into a larger line running north and south, is that correct? A. Approximately north and south, yes, sir.

Q. Which larger line runs in the vicinity of the Annie Booster? A. That is shown to be a 16-inch line.

Q. In what direction does the gas flow which is produced from wells to the south of the Annie Booster? A. It flows to the north.

Q. Is the gas that flows through the 16-inch line compressed at the Annie Booster? A. No, it is not.

Q. What gas is compressed at the Annie Booster? A. The Annie Booster is a small installation located near the 16-inch line and gathers gas from, I believe, two leases owned by Cities Service Oil Company and Phillips Petroleum Company, and that boosts casinghead gas only.

Q. Gas through the Annie Booster is casinghead gas? A. That is correct.

Q. And is boosted into this 16-inch line, is that right? A. Yes, sir.

Q. Other than the gas through the Annie Booster is a gas which is produced from the wells which are south of the Annie Booster and is dry gas?

[748]

A. The wells located south of Annie Booster are dry gas wells.

Q. And they produce dry gas? A. Yes, sir.

[749]

Q. Now, just above the Annie booster, there is a line which begins near the west line of Gray County as a four-inch line and continues over and joins the 16-inch line with several other smaller lines leading into it. Wells which deliver gas into that line are productive of what type of gas? A. Are you speaking of the line extending due south of the Pampa plant, as shown on this Exhibit No. 15?

Q. No. I am speaking of the line which begins near the west line of Gray County, just a little bit northwest of Annie booster on this map. Do you find it? A. Yes, sir.

MR. McALLISTER: Is that the four-six-eight-ten-inch line going into the 16?

MR. SPARKS: Right.

BY MR. SPARKS:

Q. That is the line, is it not? A. Yes; that line is gathering dry sweet gas.

Q. Is the area from which that 16-inch line gathers gas generally known in the company as the Fairway area? A. It is, yes, sir.

Q. That 16-inch line as it approaches the Pampa plant becomes a 20-inch line, is that correct? A. That is correct.

Q. And is any gas taken from that line into the Pampa

[750]

plant? A. Yes, sir.

Q. There is also a line leading to the Pampa plant directly from the south of the plant, directly south of the plant. Do you find that line? It starts with a line which

BLEED THROUGH

BLURRED COPY

is marked as a four-inch line? A. Yes, sir, I have located it.

Q. The map shows there are a number of stubs off of that line. What type of gas is produced from the wells which are connected to that line? A. Dry sweet gas wells.

Q. And does that line deliver gas directly into the Pampa plant? A. No, sir, it does not.

Q. Does it connect with the, adjoin with the, 20-inch line that comes from the Fairway area? A. It does, yes sir.

MR. McALLISTER: What is the size of that line? It is not shown on this map, that main stem there that runs down.

MR. SPARKS: To the south?

MR. McALLISTER: To the south.

THE WITNESS: It is a six-inch leaving the plant; no, I believe it is an eight-inch leaving the plant and there is some six-inch and four-inch line.

BY MR. SPARKS:

[751]

Q. Does that line from the south connect with the 20-inch line from the southwest prior to the take-off to the Pampa plant? A. There is a junction point there where those lines connect. However, I believe that the line from the south connects downstream from the Pampa plant take-off.

MR. McALLISTER: Connects with what?

THE WITNESS: The 20-inch line from the southwest.

BY MR. SPARKS:

Q. Now, there is also a line that shows to run almost due west from the Pampa plant or east to the plant. What

type of gas is produced from the wells which are delivering into that line? A. That is dry gas.

Q. Does that line deliver gas directly into Pampa plant or into the 20-inch from the southwest? A. It delivers gas direct into Pampa plant.

Q. And all of the gas taken through that line, therefore, is processed at the Pampa plant, is that right? A. It is all being processed there at the present time, when I left the field.

Q. Are there connections whereby that gas can be taken into the 20-inch line and by-pass the plant? A. Yes, sir.

Q. Is that ever done?

[752]

A. I don't recall that it has been done recently.

Q. There is also a line which runs toward the Pampa plant from the southeast, which has marked on it the twelve-sixteen-twenty. What is the area known as from which that line runs? A. The Little Seminole area.

Q. What type of gas is produced from the wells which deliver the gas into that line? A. Casing-head gas.

Q. According to your best recollection, are all of the lines, casing-head lines, in that area shown on the map or can you tell? A. Well, I can't tell for sure, but it doesn't look to me like all the casing-head lines are shown.

Q. The casing-head gas which comes through the 20-inch line from the Little Seminole area, is that gas delivered into the Pampa plant? A. It is all processed at the Pampa gasoline plant.

BLEED THROUGH

BLURRED COPY

Q. Is that gas brought into the plant by compressors? A. It is, yes, sir.

Q. There are also some lines from the north of the Pampa plant shown to run to the plant on Exhibit 15. What type of gas is produced from the wells which are connected to that line? A. Casing-head gas.

[755]

Q. As far as you can tell from an examination of the map, are all of the casing-head lines which deliver gas into that line and through the plant shown on the map? A. I would say that they are not all shown on this map.

Q. That line begins several miles north of the Pampa plant. There is also a line near its beginning point which is shown on the map to run to North plant. There is a break between those two. Are there lines connecting those two lines at this time? A. No, sir.

Q. There is a break in the field between those two? A. Yes, sir.

Q. So that it is not mechanically possible by turning valves or a gauge to flow gas from one line down to the other? A. Not at that point, no, sir.

Q. The gas which flows through from the casing-head wells to the north of the Pampa plant, is that processed at the Pampa plant? A. It is, yes, sir.

Q. Is it brought in by compressors? A. It is.

Q. There are also some short lines lying just to the north and somewhat to the northwest of the Pampa plant.

[754]

What type of gas is produced from the wells delivering into those lines? A. Casing-head gas.

Q. And that is delivered to and processed at the Pampa plant? A. Yes, sir.

Q. Is all of the casing-head gas which is processed in the Pampa plant brought into the plant through compressors? A. Yes, sir. It is necessary that we pull vacuum on the gathering systems in order to bring the casing-head gas into the plant.

Q. I guess we'd have to accept from that the casing-head gas was run through the Annie boosters? A. Well, it is compressed by the Annie booster and then discharged into the high pressure system.

Correct. Is the gas which is produced from the dry gas wells and the gas which is produced from the casing-head gas wells, taken into the plant through various lines, comingled at the plant before being processed? A. It is comingled before it enters the absorbers.

Q. Comingled on the discharge side of the compressors as far as the casing-head gas is concerned? A. That is correct.

Q. What disposition or utilization is made of the residue gas remaining after the extraction of the natural

[755]

gasoline liquid from the gas processed at the Pampa plant? A. The sales at Pampa plant of residue gas is to the Texas-Elf Carbon Company, and that is all the sales I recall.

BLEED THROUGH

BLURRED COPY

Q. Does that include all the dispositions of the residue gas? A. No. There is residue gas used for plant fuel, too.

Q. Is any of it returned to leases? A. Oh, yes, we return residue back to the leases from which we are purchasing raw casing-head gas. Q. Does the company own and operate the system of residue lease return lines through which this residue gas is delivered back to the oil leases for lease fuel? A. Yes, sir.

Q. And lease operations. And they come under your supervision as well as the gathering line? A. They do, yes, sir.

Q. Now, the 20-inch coming from the southwest shows on this map as I read it to connect to the 20-inch from the Little Seminole area, is that correct? A. No, it is not.

Q. The 20-inch from the Little Seminole area delivers directly into the Pampa plant? A. That is right.

[756]

Q. The gas through the 20-inch from the southwest and after the junction with the line from the due south which is not taken off at the Pampa plant flows in a northeasterly direction through a line which is marked "20" on this map, is that right? A. That is correct.

Q. Just to the north of that line there is a mark "Bowers plant", with a square and the line from the 20-inch up to the Bowers plant, is that a tie-over or take-up line from the 20-inch to the Bowers plant? A. There is a take-off line off of the 20-inch into the Bowers plant, yes, sir.

Q. Does that appear to be the approximate position, as far as you can tell from this map of that tie-over line? A. Yes, sir.

[757]

Q. Is a part of the gas carried through that 20-inch line processed at the Bowers plant? A. It is, yes, sir.

Q. Is there other gas processed at the Bowers plant? A. Yes, sir, there is other gas processed at the Bowers plant.

Q. Is all of the other gas processed at the Bowers plant casinghead gas? A. No. There is gas from two or three dry gas wells processed at the Bowers plant.

Q. In addition to that taken off of the 20-inch? A. That is correct.

Q. I notice from the map that there is shown two other lines leading to the Bowers plant. Are there other lines than those shown on the map? A. Yes, sir, there are.

Q. Which lead to the Bowers plant? A. Yes, sir.

Q. Is the casinghead gas and the dry gas which is processed in the Bowers plant co-mingled before being processed through the absorbers? A. It is.

Q. What disposition is made of the residue gas remaining after extraction of the gasoline from the gas at the Bowers plant?

[758]

A. Residue from the Bowers plant goes to the Texas-Elf Carbon Company and also returned to leases, to lease operation, and camp fuel.

Q. Camp fuel? A. Camp fuel.

Q. Where is the Texas-Elf Carbon Company's plant located, just approximately, from, say, the Bowers plant? A. It is located approximately two miles west.

Q. This 20-inch line between the Pampa plant and

BLEED THROUGH

BLURRED COPY

Gray plant continues on up to Gray plant. That is correct, is it not? A. That is correct.

Q. Is the balance of the gas—what utilization is made of the balance of the gas through that line after the deliveries from the line to Pampa plant and Bowers plant? A. The balance of the gas is processed at Gray Gasoline plant.

Q. If you will turn to the right-hand side of the map, I find the line which begins with a 10-inch line running north and south in the lower right-hand corner of the map. Do you find that point? A. I have, yes, sir.

Q. That line is joined by several lines and then turns to the northwest at a point that is marked 12-D on this map. Do you find that?

[759]

A. Yes, sir, I find that.

Q. At that point what is the type of gas that is moved through that line? A. Dry gas.

Q. All of it is produced from dry gas wells; is that right? A. All of it is produced from dry gas wells.

Q From the west, you find the line which is marked 8, and which would appear from the map to be tied into a line running north to Wheeler booster marked 12 and 16 and also tying into this line which is marked 12-D. Is that a correct reflection of the situation? A. Yes, sir, it is.

Q. What is the direction of the flow of gas through that 8-inch line? Does it flow east to the 12-E line, or west up to the 12-16 line? A. That system is all open, and the 8-inch line between the 12-inch line, marked 12-D on Exhibit 15, and the 12-inch and 16-inch lines extending south

from Wheeler booster serves as a loop, and it depends upon the operations at the Wheeler booster, which way the gas will flow through that pipe line.

Q. Is all of the gas in that loop dry gas, or is it casinghead? A. It is all dry gas.

Q. Now, from the east I see a line which is marked

[760]

3-4-6-8. Do you find that? It has a hook on it. A. I do, yes, sir.

Q. What is the character of gas which is gathered through that line? A. It is dry gas.

Q. Is it delivered in the line 12-D? A. No, sir, it is not.

Q. From the junction point of that line with a line from the southeast marked 12-D, there are two lines, are there not, shown to the Wheeler booster? A. That is correct.

Q. Are those lines connected at the point of juncture? A. They are connected on the discharge of the compressor.

Q. Does the gas through both of those lines go through compressors? A. It does.

Q. Directly to the east of Wheeler booster, I find a series of heavier lines. What type of gas is moved through those lines? A. Casinghead gas.

Q. Is that gas taken into the booster? A. It is.

Q. Is it brought in by compressors? A. It is, yes, sir.

Q. To the north and west of Wheeler booster there is a

[761]

small line marked 6. What type of gas moves through that line? A. That is also casinghead gas.

BLEED THROUGH

BLURRED COPY

Q. And is it brought into the Wheeler booster by compressors? A. Yes, sir.

Q. Are there any lines in the ground in the vicinity of the Wheeler booster which do not appear on this map, so far as you can tell from observing the map? A. I don't notice any residue return lines.

Q. I am talking about raw gas gathering lines. A. I would say not all the lines are on the casinghead system or the dry gas system, but I would have to check that.

Q. It is a fact, is it not, that none of the residue return lines appear on the map? A. I have not noticed any.

Q. Is all of the gas which comes into the Wheeler booster compressed at the booster, or is part of it by-passing the compressor? A. It is all compressed at the booster.

Q. And moves in what direction from the booster? A. It moves in a westerly direction.

Q. Through the line marked 20-inch line? A. Yes, sir.

Q. I find on the map just north of that 20-inch line a

[762]

square Lefors plant. That is a gasoline plant of Phillips Petroleum Company, is it not? A. That is correct.

Q. Is any gas taken from the 20-inch line and processed in Lefors plant? A. Yes, sir, there is.

* * *

[766]

Q. What disposition is made of the residue gas after extraction of the natural gas liquids at the Gray plant? A. The residue is delivered to Independent Natural Gas Company.

Q. All of it or part of it?

[767]

A. Part of it. Part of the gas is delivered back to the field for lease operation and development. Part of it is delivered for camp fuel. Part of it is utilized for plant fuel, and we also deliver gas to the Texas-Elf Carbon Company from the Gray plant.

* * *

[775]

Mr. Etchieson, there has been considerable testimony here with reference to sweet and sour gas. Are the two classes of gas, sweet and sour, defined by Texas law? A. Yes, sir, they are.

[776]

Q. What is the statutory definition of sour gas? A. The Railroad Commission describes gas with a hydrogen sulphide content of 1-1/2 grains per hundred cubic feet as sour gas, and gas with a lesser H2S content is classified as sweet gas.

Q. Does that also include a specification with reference to total sulphur content? A. No. The total sulphur content is 20 grains per hundred cubic feet.

Q. In other words, sour gas is gas which contains more than a grain and a half of hydrogen sulphide, H2S, or more than 20 grains of total sulphur content per hundred cubic feet? A. That is correct.

Q. Sweet gas is gas which contains less than those amounts? A. That is correct.

* * *

BLEED THROUGH

BLURRED COPY

[777]

Q. The definition, just to get it word for word as it is in the statute, appears in Article 6008, Section 2, Subsection (g). "The term 'sour gas' shall mean any gas containing more than 1-1/2 grains of hydrogen sulphide per 100 cubic feet, or more than 30 grains of total sulphur per 100 cubic feet, or gas which in its natural state is found by the Commission to be unfit for use in generating light or fuel for domestic purposes."

Do you know of any orders of the Railroad Commission with reference to the last provision concerning the finding by the Commission of gas as being unfit for generating light and fuel which would not be sour gas, as otherwise defined by the statute? A. No, I do not.

Q. Subsection (h) provides:

> "The term 'sweet gas' shall mean all natural gas except 'sour gas' and 'casinghead gas' ".

Mr. Etchieson, we sometimes speak of casinghead gas as

[778]

being sour or sweet, do we not? A. That is correct.

Q. But there is no statutory or Railroad Commission classification of casinghead gas as between sour and sweet, is there? A. I know of no classification that the Commission has for determining whether or not casinghead is sweet or sour.

Q. The rules of the Texas Railroad Commission and its conservation laws provide for various uses which can be made lawfully of the various types of gas, sweet and sour

and casinghead, do they not? A. That is correct.

MR. McALLISTER: Might I ask Mr. Etchieson what the basis for classification is as determined by him in his operations, for the casinghead gas that you list as sour and sweet?

THE WITNESS: I consider casinghead gas with a grain and a half of H2S per hundred cubic feet as sour gas.

MR. McALLISTER: Your operations are gauged according to that? What I mean by that is, casinghead gas with that sulphur content would go through a desulphurizer before it would go into a stream of gas destined for further pipe line movement?

THE WITNESS: Yes, it would. If the composite was greater than a grain and a half, we would treat it.

MR. McALLISTER: You might also treat it if the sales

[779]

contract that you had required a lesser sulphur content than 1-1/2 grains per hundred cubic feet?

THE WITNESS: Oh, yes, sir, that is correct.

MR. McALLISTER: Some of your pipe line bore a half grain as a maximum, did they not, or do you know?

THE WITNESS: I don't know. I recall one grain as a maximum, but I am not sure of that half grain.

* * *

[917]

Q. Mr. Etchieson, yesterday you were asked if there were some instances in which Phillips purchased gas but do not go clear to the wells, with its lines. Do you remember that? A. Yes, sir.

BLEED THROUGH

BLURRED COPY

Q. Have you checked into that to determine those instances? A. I have, yes, sir.

Q. Is it common in many cases for you, as a gatherer in the Panhandle Field, to gather gas from the separators on casing-head leases rather than from the well connections? A. Yes, sir; we very often gather gas from the separator.

Q. Who owns the lines from the wells to the separators? A. The producer or the owner of the lease.

Q. Is the separator ordinarily located on the lease? A. It is operated on the lease usually on a central point on the lease.

Q. Are there any other instances than connections to separators where you take gas from wells and do not own the lines clear up to the well?

[918]

A. Yes, sir. I recall two such instances in the Pampa area.

Q. Name one of them. Identify the lease and the owner, producer. A. One of those leases is the Holt Brothers-Cobb lease.

Q. Where is that lease located? A. That lease is located slightly north and east of our Lefors gasoline plant in Gray County, Texas.

Q. How long is the line of the lease operator or lease owner before it delivers it into Phillips' gathering lines? A. It is a distance of approximately three quarters of a mile.

Q. And in what line is that gas delivered? A. The 20-inch gathering line from Wheeler County.

Q. Do you know the size of that line? I mean the lease

owner's line, the three quarters of a mile line. A. I happen to, yes ,sir. It is a two-inch.

Q. And from how many wells is the gas produced which is given through that line? A. Two wells.

Q. You mentioned another instance in the Pampa area. A. Yes, sir. Gathering line extending west from our Pampa gasoline plant, we are purchasing gas from the Service Drilling Company off of the discharge of a field booster, and that is casing-head gas, and I would like to correct

[919]

a statement I made in the record yesterday. I believe I testified that all the gas in that particular gathering system was dry gas. However, this small volume received from the Service Drilling Company is not.

* * *

[934]

Redirect Examination by Mr. McAllister

* * *

[942]

Q. As I take your testimony you have never made a study as to whether or not one line ought to be more particularly classified as a gathering line or classified as a transmission

[943]

line or classified in some other fashion? A. Mr. McAllister, in the field we Phillips boys consider that whole system a gathering system and refer to it as a gathering system.

* * *

BLEED THROUGH

BLURRED COPY

[993]

MASON G. WALTERS

[994]

was recalled as a witness, and having been previously duly sworn, was examined and testified further as follows:

Direct Examination (Resumed) by Mr. McAllister

Q. Mr. Walters, you are the same Mason G. Walters that appeared in this case, previously sworn and testified? A. Yes, I am.

Q. Did you have prepared, or prepare yourself, an exhibit which depicts in graphic form the plant layout for the Sherman and Hansford plants, the Sneed plant, the Gray plant, the Dumas plant, the Eunice plant, the Fullerton plant, the Goldsmith plant and the Crane plant of Phillips Petroleum Company, and when I refer to "plant" there, I mean gasoline plant. A. I have had such sketches prepared, yes, sir.

Q. Under your supervision and direction? A. Yes, sir.

MR. McALLISTER: I would like to state for the record, Mr. Examiner, that the graphs that we had prepared, we are advised by Mr. Sparks this morning there have been some changes with respect to three of those graphs, the Sherman-Hansford plants, the Sneed plant, and the Dumas plant, and out of the exhibit we have prepared we have stripped the graphs from that exhibit that we had prepared and we are substituting those with those which were supplied to us this morning by Mr. Sparks. He has been very gracious in supplying us sufficient

[995]

copies so that the graphs with respect to plants that I have named as being supplied by Mr. Sparks to us this morning were not actually prepared by Mr. Mason Walters. We have taken the ones he prepared out in order that we might have now on the record at this time the most up-to-date information on the plant layouts in those plans, the Sherman-Hansford, the Dumas, and the Sneed plants, so that without asking Mr. Walters where they came from may we have a stipulation, Mr. Sparks, that they are as near up to date and as complete and as true and correct as it is possible to make them?

MR. SPARKS: Certainly.

MR. McALLISTER: I am going to ask that the main exhibit which we had prepared be marked for identification at this time as Exhibit No. 45.

PRESIDING EXAMINER: It will be so marked.

* * *

MR. McALLISTER: Before I pass out the corrected sheets, Mr. Examiner, I would like to have these designations provided for the individual graphs or maps:

[996]

I ask that the corrected graph covering the Sherman-Hansford plants be marked for identification as Exhibit 45-A.

PRESIDING EXAMINER: It will be so marked.

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED EXHIBIT NO. 45-A FOR IDENTIFICATION.)

BLEED THROUGH

BLURRED COPY

MR. McALLISTER: I ask that the corrected graph for the Sneed plant be marked for identification as Exhibit 45-B.

PRESIDING EXAMINER: It will be so marked.

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED EXHIBIT NO. 45-B FOR IDENTIFICATION.)

MR. McALLISTER: I ask that the graph for the Gray plant, which is in the folder, be marked for identification as Exhibit 45-C.

PRESIDING EXAMINER: It will be so marked.

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED EXHIBIT NO. 45-C FOR IDENTIFICATION.)

MR. McALLISTER: I ask that the corrected plan for the Dumas plant be marked for identification as Exhibit 45-D.

PRESIDING EXAMINER: It will be so marked.

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED EXHIBIT NO. 45-D FOR IDENTIFICATION.)

MR. McALLISTER: The next four graphs are in the folder, that for the Eunice plant, and I ask that that be marked for identification as Exhibit 45-E.

PRESIDING EXAMINER: That is the Eunice plant?

[997]

MR. McALLISTER: Yes. The graph of the Eunice plant is 45-E.

PRESIDING EXAMINER: That will be so marked.

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED EXHIBIT NO. 45-E FOR IDENTIFICATION.)

MR. McALLISTER: The graph for the Fullerton plant, Mr. Examiner, I ask that that be marked for identification as Exhibit 45-F.

PRESIDING EXAMINER: That will be so marked.

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED EXHIBIT NO. 45-F FOR IDENTIFICATION.)

MR. McALLISTER: I ask that the layout for the Goldsmith plant be marked for identification as Exhibit 45-G.

PRESIDING EXAMINER: That may be so marked.

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED EXHIBIT NO. 45-G FOR IDENTIFICATION.)

MR. McALLISTER: And I ask that the graph showing the plant layout of the Crane plant be marked for identification as Exhibit 45-H.

PRESIDING EXAMINER: That will be so marked.

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED EXHIBIT NO. 45-H FOR IDENTIFICATION.)

MR. McALLISTER: I would like to request, if we may, that when the reporters bind in those graphs we will do it for them so that they will all be impressed within the folder

[998]

in the official file copy.

BY MR. McALLISTER:

Q. Mr. Walters, will you, by reference to Exhibit 45, and particularly to the exhibits marked for identification as Exhibits 45-C, 45-E, 45-F, 45-G and 45-H, state for the record the source from which data and information shown

BLEED THROUGH

BLURRED COPY

on those maps or graphs was obtained. A. The data shown on those maps or graphs which you have just mentioned was obtained from the Phillips Petroleum Company sketches which they supplied to us.

Q. And in preparing these graphs which I have just referred to and identified, did you change and modify the information on the drawings submitted to you by Phillips? A. There have been no changes on those drawings except the legend.

Q. The legend appearing in the lower right-hand corner was provided by you? A. That is right.

Q. And otherwise you have reflected on these drawings, as I have previously identified them, all of the data and information contained upon the drawings submitted to you by Phillips Petroleum Company? A. Yes, sir.

Q. And have you recently checked those to determine whether or not in relation to the drawings supplied or later

[999]

information that you may have obtained, that as far as you can determine from that information which you have, they are complete? A. Yes, sir.

[1000]

Q. Do you have anything further to state, Mr. Walters, with respect to the drawings which have been identified as Exhibits 45C, 45D, 45E, 45F, 45G and 45H? I believe I included 45D in there. That should be eliminated. It should be 45C, E, F, G, and H. If you have no comment to make or observation, Mr. Walters, it is perfectly all right to say

so. A. I might say that these were received by our staff in Bartlesville on November 6, 1950, and they are the latest data that we have up until the present time.

Q. On the plant lay-outs? A. On the plant lay-outs.

Q. And the graphs which were the drawings showing the plant lay-out of the Sherman and Hansford plants, Sneed plant, and the Dumas plant, which have been supplanted this morning by later drawings, as you had inserted them in the general exhibit and which have been removed, had been prepared in the same manner and from like information as that which you have described with respect to the other exhibits which I have identified? A. That is correct.

MR. McALLISTER: Mr. Examiner, I offer in evidence Exhibits 45A, 45B and 45D on the basis of the stipulation which I have with Mr. Sparks, as stated on the record, and with respect to the other exhibits, Exhibits 45C, 45E, 45F

[1001]

45G and 45H, I offer those in evidence as supported by the testimony of Mr. Walters.

PRESIDING EXAMINER: Is there any objection?

MR. SPARKS: No objection.

PRESIDING EXAMINER: Exhibit No. 45, consisting of sub-exhibits 45A to 45H, inclusive, are received in evidence.

(THE DOCUMENTS ABOVE REFERRED TO WERE RECEIVED IN EVIDENCE AS EXHIBITS 45 to 45H, inclusive.)

• • •

BLEED THROUGH

BLURRED COPY

Cross-Examination by Mr. Sparks

Q. Mr. Walters, on the sketches that were furnished to you, so that the record will be clear, it was not represented to you that all of the mechanical equipment located on the plant was shown in the sketches, was it? A. That is correct; just the principal equipment and a sketch showing the general flow of gas through the plants.

* * *

[1002]

A. W. PARIS

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. McAllister

Q. What is your full name, Mr. Paris? A. A. W. Paris.

Q. I believe you are employed by Phillips Petroleum

[1003]

Company? A. Yes, sir.

Q. And have been for a number of years? A. Yes, sir.

Q. When did you first enter the employment of Phillips Petroleum Company? A. November 10, 1923.

Q. And you have been employed continuously by them since that time, have you? A. Yes, sir.

Q. Wili you state briefly for the record what your education and experience has been, please? A. Education, high school; experience, 35 years in the industry.

Q. Will you just briefly outline what different positions you have had with Phillips, where you began and the important changes in your employment up to the time you entered your present duties? A. My first job with Phillips was as a stillman. My next job, I believe, was a maintenance foreman in field maintenance. I believe my next job was a plant superintendent's job, and the next district superintendent.

Q. District superintendent of— A. (Interrupting.) Operations and maintenance of gasoline plants and gathering systems.

* * *

[1004]

Q. I believe you have supervision over the plants that we have been naming this morning with respect to certain drawings that have been marked for identification as the Sherman and Hansford plants, the Sneed plant, the Gray plant, the Dumas plant, all of those are under your supervision? A. That is correct.

Q. Do you have supervision over the Eunice, Fullerton, Goldsmith and Crane plants? A. No, sir.

* * *

[1018]

Q. With respect to the lines you have described as the lines which bring gas into the Sherman plant, will you state for the record, Mr. Paris, just where the gas from each of those five lines, the four 24-inch lines and the one 16-inch line, is metered into the plant. I say "into the plant." Maybe

BLEED THROUGH

BLURRED COPY

it is inside of the plant. A. Yes, sir.

I think if you will notice, Mr. McAllister, there are two vessels there indicated as sweet gas scrubbers and sour gas scrubbers.

Q. That is right. A. Right on the outlet of those scrubbers there are meters located, and that is the point where the gas into Sherman plant is measured.

Q. Does that say right above those on the outlet side of those scrubbers, meters 4, and then meters 3? Is that the number of meters? A. That is the number of meters, yes, sir.

Q. So that there is a bank of meters there, I suppose, connected to a header; is that right? A. That is right, yes, sir.

Q. And by this drawing that we have here, does that mean that the only gas going through these sour gas scrubbers is the gas coming off of line O? A. No, sir.

Q. I notice on the 24-inch line, named mixed, you have two by-passes; one is the 24-inch — that is line N, 24-inch mixed — there are two by-passes leading off of that line; one is a 24-inch by-pass and the other is a 12-inch by-pass. There are some letters in a little square there marked "meter" in these 12-inch by-passes.

[illegible]

Q. What would be the purpose of the 12-inch by-pass as shown on this drawing? A. That is a by-pass through which we control the amount of gas out of the mixed line or the in line into the sweet stream.

1020

Q. Well, you have to synchronize, so to speak, the operation of the 12-inch by-pass and the 24-inch by-pass to handle all of the gas coming through the 24-inch line, which is Line N? A. That is right. You might wonder why a by-pass when there is a valve indicated going right into the sweet header off of Line N, but that is a 24-inch valve and it is very difficult to control the flow through a valve that large, so we put the small by-pass in there with a meter in it. We are limited to the amount of gas we can take from the mixed or in line into the sweet system for the reason that it would make that stream sour also, so we can't put in only so much of it and we put in a small by-pass with a meter on it which will give us an indication of the amount of gas we are putting in there and enable us to control the plant, and the balance of it goes around to the 24-inch by-pass through the sour stream.

* * *

[1034]

Q. It is a continuous flow of gas from the lines leading into the plant through the plant and out through the residue lines to a connection with Michigan-Wisconsin Pipe Line Company? A. That is true with respect to the gas. Some of these vapors are compressed. The vapors we have been talking about go back in there.

* * *

[1045]

Q. Then it is true, is it not, that this plant as operated and its operations as to volume was gauged each day by the volume of gas to be delivered, or which can be delivered

BLEED THROUGH

BLURRED COPY

to Michigan-Wisconsin? A. If I understand your question you mean the volume of gas that we process through the plant is gauged by the volumes received from us by Michigan-Wisconsin; is that what you mean?

Q. What they can take or what they want or what you can deliver to them.

[1046]

A. Yes, I think that is right.

Q. I do not say it is their whim at all, but whatever they can take or whatever they require fixes the volume that you can process or do process through the plant? A. That is right.

Q. In other words, it is not the reverse of that, that you process what you care or determine yourself, and then you give it to them and they have to take what you give them, it is just the reverse of that? A. That is right. That, of course, within the limits of the contract.

* * *

[1048]

Q. At all times from the point where gas enters the plant to the point where gas goes out of the plant there is a continuous flow when the plant is in operation? A. That is right.

Q. And except when the lines leading into the plant are valved off for some reason there is a continuous flow through all those lines leading into the plant and through

[1049]

the plant and on out, and, of course, necessarily there is a flow all the way from the well at the pressure which is

generated out of the well? A. There is no boosting between the well and that point.

Q. That is right, and there is no boosting on the Sherman system anywhere? A. No, sir.

Q. I think the question and answer is complete, but that is a continuous flow all the way through the system, through the plant and over to connect with the Michigan-Wisconsin? A. I wouldn't say it was a continuous flow through all of the lines, but there is a continuous flow. There may be one line shut down for repairs or something, but the lines that are in service and open, there is a continuous flow except you may have emergencies or something that stops the flow.

* * *

[1082]

Q. In this Dumas plant do you have streams of sweet and sour gas? I am referring now to Exhibit 45-D, which is

[1083]

the Dumas plant. Are there streams of sweet and sour gas going through that plant for processing? A. Streams of sour gas only.

Q. Streams of sour gas only? A. Yes, sir. I mean by that it is sour at the point that the plant processes it.

Q. Sour as it flows into the plant? A. That is right.

Q. And all of the gas into that plant goes through that 24-inch line at the upper right-hand corner of Exhibit 45-D, where it is shown to connect with what is termed "Inlet scrubbers (3)"; is that right? A. That is right.

BLEED THROUGH

BLURRED COPY

Q. And the first meter on that flow of gas is beyond the inlet scrubbers — and when I say "beyond" I mean as the lines are drawn — where there are six meters; is that right? A. That is right.

Q. And that is a bank of meters? A. Yes, sir.

Q. Are those meters so designed that they show the pressure of the gas that passes that point? A. Yes, sir.

Q. Then that flow of gas goes on to what is termed as a "gas treater"; is that right? A. That is right.

[1084]

Q. And that is a desulphurizer? A. That is right.

Q. You show four meters on the discharge of the gas treater. Why is that gas metered there again? A. Those are control meters for balancing the flow through the treaters.

Q. Through the gas treaters? A. Yes, sir.

Q. There is a meter on each run, so to speak. A. Each contactor has its own meter, so you can tell how much gas is passing through each one of them.

Q. So that not one will be overloaded to the point where it will not perform the process for which it is designed? A. That is correct.

Q. At what point in the Dumas plant operation do you measure the sulphur content remaining in the residue gas stream? A. We measure it — we are testing constantly downstream from the treater. That is done every hour or so during the day.

Q. You take a sample of the gas that comes out of these treaters and test it for sulphur content? A. That is not the quantity of sulphur, that is merely an indication whether it is sweet or sour.

* * *

[1094]

Q. As I understand the diagram, which is Exhibit 45-D, the one that you have before you showing, you might say, the flow diagram of the Dumas plant, the gas coming in through the treater which we talked about a moment ago, then goes through the plant absorbers — you have a bank of six of them — and then individual meters on each one of the units, and the gas goes on out of the plant absorbers out through a 24-inch line to the El Paso Natural Gas Company shown down relatively to the bottom left-hand corner of the drawing; is that right? A. That is right.

Q. Where you show a meter just to the left of the line leading out of the plant absorbers from the plant fractionator, that is the same situation we had with respect to the Sherman plant where the gas is from the gasoline extracting facilities where some of the lighter hydrocarbons flow off of that and come back into the stream of residue gas; isn't that right? A. That is the point where the overhead vapors could come back into the stream.

Q. Could come back in? A. Yes, sir.

Q. But is that one of the points at which you control the volume flowing in there in order to maintain your Btu content in the residue gas going to El Paso, or where you add Btus, if that is desired?

[1095]

A. That is where we would dispose of the light hydrocarbons off of the gasoline which we did not wish to retain in the gasoline, if we had any. At the present time we

BLEED THROUGH

BLURRED COPY

are not operating the fractionators, therefore there are no vapors entering at that point.

* * *

[1103]

Q. You mentioned the words "gathering system" and so on. Have you ever made a study to determine whether all of the lines that are connected to a system or to the system that serves the Dumas plant are actually gathering lines or whether some of those lines might not better be classified

[1104]

as field lines or whether some of them ought to be classified as transmission lines? Have you ever made such a study to determine the proper classification of those lines? A. Well, I wouldn't know on what basis to start such a study in the first place, but throughout my 35 years in the industry it has never been known as anything else, except a gathering system.

Q. I mean that is the way you generally refer to it? A. Always have, yes, sir.

Q. But that system has changed very materially over those 35 years? A. The purpose of it hasn't.

Q. I didn't say that. The lines, the size of the lines, the connections, the plants, very, very materially have changed over that period of time? A. Are you referring to these particular plants?

Q. I am referring to these particular plants. A. Well, yes, because they weren't there at that time.

Q. They weren't there at that time at all. A. No, sir.

Q. And all these gathering systems are designed to provide a backbone line or a series of backbone lines leading into a plant and from those backbone lines or main lines you have smaller lines or lateral lines leading off

[1105]

from them, that is general design, is it not? A. Oh, yes, we have just a fan-shaped system or it might be most any kind of shape.

Q. But it all starts out with a stem line, of large diameter, which provides the backbone of whatever you are going to do in one area of a field and then you take your leads off of that to serve the wells that are to be tied into this system, isn't that right? A. Yes, I think that is right. Certainly, because your greater volume is near your processing point.

Q. Sure, you have to do it that way. A. And the lines would naturally be larger at that point.

* * *

[1108]

Q. I want to ask you a few questions — I do not think I will be able to finish all these questions this afternoon — about the Sneed plant. That is Exhibit 45-B. Are you familiar with the operation of the Sneed plant?

[1109]

A. Generally, yes, sir.

Q. It has been in operation for quite some time. A. Yes.

Q. Were you not superintendent of that plant at one time? A. No, sir.

BLEED THROUGH

BLURRED COPY

Q. You were not? A. No.

Q. This plant is operated in a manner that differs somewhat from the other plants that we have been discussing this morning, the Dumas and the Sherman plant, is it not? I do not mean the equipment or physically, in that the gas is compressed by Panhandle before it passes through the absorbers of Phillips Petroleum Company. A. That is right.

Q. Just where do the lines indicate the flow of gas into the plant? Is that in the upper right-hand corner just to the right of what is termed the scrubbers, 24-inch field gas to plant? A. Is that Panhandle gas you are speaking of?

Q. No, that is Phillips gas. A. Yes, Phillips gas enters at that point.

Q. And that gas of Phillips goes through these scrubbers, it is metered, and then goes to a compressor. Those are all the facilities of Phillips; is that right?

[1110]

A. That is true.

Q. Then it goes through a gas treater, and at that point the gas treater, all of the gas going through that is Phillips gas; is that right? A. I do not know where the title changes hands on that gas, Mr. McAllister, but I would say at that point it is Phillips gas there.

Q. It is Phillips gas at that point. I was not thinking so much of ownership as gas produced and brought into the plant through lines wholly owned by Phillips, and that is true at that point, all the gas at that point runs into the plant through pipe lines wholly owned by Phillips; isn't

that right? A. I don't know about the ownership. We operate the lines. Whether they are wholly owned or not, I do not know.

Q. I mean you operate them? A. Yes, sir.

Q. That is perfectly satisfactory. A. I consider them Phillips lines.

Q. That is the same way I did, and I was not stressing ownership or operation or what not. Maybe they do not own them, I do not know. But out of the gas treaters you go through two meters there. Would all that gas come down — there is a lead-off just beyond the meters marked as two, it goes through a six-inch line that says "treated gas to reabsorber."

[1111]

Is that ordinarily valved off there so that the gas will flow through the meters — well, I am lost. How does that gas flow? A. That is just a take-off from that line, that six-inch line.

Q. A take-off? A. Yes, sir, it goes around through the reabsorber, through the reabsorber, and into the fuel system. That is a relatively small volume of gas.

Q. And that is not the main flow out of the gas treater? A. No, sir, the main flow continues on.

Q. Continues on to that elbow and then down through three additional meters; is that right? A. That is right.

Q. And comes on down to a point where it joins a stream coming in through Panhandle Eastern's line and goes through compressors there, and those compressors are Panhandle's compressors? A. That is right.

Q. Then after being compressed, the total volume, that

BLEED THROUGH

BLURRED COPY

is, the Phillips gas, and the gas coming in over the Panhandle lines goes through the compressors out of the compressors through a 24-inch line and up through the absorbers — it shows a bank of six with a meter on each one — and out of that back down through a line, a 24-inch line, which shows

[1112]

the flow of that total stream to a dehydrator; is that right? A. That is right.

Q. Is that the normal flow of the volume of gas through the joint facilities of Phillips and Panhandle? A. That is right.

Q. I don't mean joint ownership, each owns separate particular facilities that we have been talking about. A. That is right.

* * *

[1116]

Q. Are the liquid hydrocarbons obtained through the processing of natural gas in this plant piped to the fractionating plant of Phillips Petroleum Company? A. The Borger fractionating plant?

Q. Yes. A. It is.

Q. And is your answer here the same as it was with respect to the Sherman plant, that you know of no sale of liquid hydrocarbons as it comes from this plant, but that all of it goes through that line to the fractionating plant at Borger? A. I don't know of any sale. However, I would not make a positive statement on that because I am not familiar with this agreement between Phillips and Panhandle.

Q. Oh, I see. A. The liquid part of it, but outside of that I would say there is not any.

Q. Well, I was not thinking of that when I asked the question. There might be some difference here, but so far as you know all of those liquid hydrocarbons flow into the Borger fractionator? A. I know they do, yes, sir.

* * *

[1119]

MR. TORKELSON: Mr. Examiner, I have had a conversation with counsel for Phillips Petroleum, and also with counsel for the Federal Power Commission regarding certain information that I received from Madison Gas and Electric Company, Madison, Wisconsin, as to the State of Wisconsin being a consumer of natural gas purchased from Michigan - Wisconsin Pipe Line Company, and we have agreed that I may read into the record two letters that I have received from the secretary and treasurer of that company, and that when read into the record it will be stipulated that the secretary and treasurer of the company, if called as a witness in this proceeding, would testify to the same effect as his letter to me.

PRESIDING EXAMINER: That is agreeable with the Examiner.

MR. TORKELSON: I will now proceed to read the letters.

The letter is on the letterhead of Madison Gas and Electric Company, 100 North Fairchild Street, Madison 1, Wisconsin:

"April 10, 1951, Public Service Commission of Wisconsin, State Office Building, Madison 2, Wisconsin.

BLEED THROUGH

BLURRED COPY

"Attention Mr. William E. Torkelson, Chief Counsel.

"Gentlemen:

"This will confirm information given to your office this morning. The sales of natural gas to the State of Wisconsin, Executive Residence, at 101

[1120]

Cambridge Road, Madison 4, Wisconsin, by Madison Gas and Electric Company, during the period from December 1949 when natural gas was introduced through March 31, 1951, were 1472.8 Mcf for which bills amounting to $1558.10 were rendered. The aforesaid natural gas was purchased by Madison Gas and Electric Company from Michigan-Wisconsin Pipe Line Company.

"Very truly yours,

"R. F. Stumpf,
"Secretary-Treasurer."

I also have another letter also dated April 10, 1951, and with the same address, to my attention, on the letterhead of Madison Gas and Electric Company as follows:

"This will confirm information given to Mr. O. P. Deuel of your office yesterday afternoon. The sales of natural gas by Madison Gas and Electric Company to the State of Wisconsin (University of Wisconsin account, including the University Executive Mansion) during the period from December 1949 when natural

gas was introduced through March 31, 1951, were 12,482.7 Mcf, for which bills amounting to $13,479.84 were rendered. The aforesaid gas is purchased by Madison Gas and Electric Company from Michigan-Wisconsin Pipe Line Company.

"Very truly yours,

[1121]

"R. F. Stumpf,
"Secretary-Treasurer."

My understanding is, your Honor, that counsel have agreed that R. F. Stumpf, if called as a witness, would testify to the effect as stated in his letters.

MR. PURDUE: That is correct, Mr. Examiner.

PRESIDING EXAMINER: Is that your understanding, Mr. Sparks?

MR. SPARKS: That is correct.

MR. TORKELSON: We ask that the material read be received in the record.

PRESIDING EXAMINER: It will be received in evidence.

* * *

A. W. PARIS

resumed the stand as a witness, and having been previously duly sworn, was examined and testified further as follows:

* * *

BLEED THROUGH
BLURRED COPY

Direct Examination (Resumed) by Mr. Perdue

* * *

[1122]

Q. You were, on Friday, referring to Exhibit 45-B and had been discussing the flow of gas through the Sneed plant, as depicted on that exhibit, and I believe we had just gotten the gas through the compressors of Panhandle Eastern Pipe Line Company in the lower center of the exhibit. I note that in discussing the flow of gas through the Panhandle compressors you mentioned the fact that the gas coming down the line from the Phillips gas treater when it reached a point at which you were not sure of, title passed to Panhandle Eastern Pipe Line Company.

The gas then, of course, is mixed and makes a right angle there, the line down from the Phillips plant is mixed with Panhandle Eastern raw gas flowing in from their own wells and gas they purchased from Phillips 27 Philrock wells in Moore County; is that not correct? A. The gas that we deliver through our gas treater to Panhandle Eastern is mixed with Panhandle Eastern's gas at the suction of their compressor station. I do not know what disposition they make of the gas from the 27 wells.

Q. Then the gas leaves Panhandle's compressors and

[1123]

returns once more to the Phillips' Sneed plant. Because you called attention to the fact that the title passed on its way from the treater to the Panhandle compressors, I would like to ask you if you know if title passes from

Panhandle back to Phillips as the gas moves from the compressors to Phillips absorbers. A. I understand it does not.

Q. It does not? A. That is right.

Q. The gas then moves into a bank of six absorbers, I believe, after it has been compressed by Panhandle. Could you tell me at what pressure Panhandle compresses that gas. A. Approximately 500 pounds.

Q. It then moves through the Phillips' absorbers at 500 pounds. Those meters on top of the absorbers then must be control meters? A. That is right.

[1124]

Q. The gas, then, of course, leaves the absorbers and passes as depicted on Exhibit 45B once more down parallel with the line where it went to the compressors through the dehydrater, as shown on the bottom left center of 45B and into the line of Panhandle Eastern, is that correct? A. That is correct.

Q. Does that dehydrater down there belong to Panhandle Eastern? A. It does not belong to Phillips, I can answer it that way.

Q. Could you tell me the approximate pressure that the gas moves into the Sneed plant at? A. Which gas are referring to?

Q. That is on the line in the right side of 45B, 24-inch field line gas to plant, just before it enters the scrubbers, to the scrubbers. A. That is the pressure entering the compressors?

BLEED THROUGH

BLURRED COPY

Q. Yes, sir. A. I' m not sure about that, but I believe it is about 160 pounds.

* * *

[1131]

Q. As we see on Exhibit 45-C, the gas leaves the intake compressor and moves to the right, as shown on 45-C, to a point where it passes into the absorbers and there, of course, is commingled with gas brought from Wheeler County; isn't that correct, sir?

[1132]

A. That is correct.

Q. Then the gas moves from the absorber to the left and passes direct to the left and then moves to the southwest and across the south fence of the Gray plant and moves out and over to the Independent Natural Gas Pipe Line, does it not, sir? A. That is correct.

Q. It passes through — of course there is a gas purchase meter, and that is where the gas is metered, and cost is determined to natural gas pipe line companies, is it not — or the Independent Natural Gas Pipe Line Company? A. Yes, that is where the gas is metered to Independent.

Q. Although not shown on this Exhibit 45-C almost as soon as it passes through that meter it goes through Independent Natural Gas's scrubbers, does it not, sir? A. I am not certain about that, but it appears they have some scrubbers there. I don't know about that.

Q. Then, of course, it flows into Independent Natural Gas compressor station; is that right? A. I believe that is right.

Q. Do you know what pressure it is boosted to at that pressure station, sir? A. No, sir, I do not.

Q. The 20-inch line which is marked Ing. 20 inch, and is a broken line from the absorbers to the gas purchase meter,

[1133]

do you know, sir, if that line belongs to Phillips Petroleum Company? A. I understand it does not. From a point marked "Back pressure regulators" on to the Independent compressor station is not owned by Phillips.

Q. From the regulator directly underneath the right end of the intake compressor to the gas purchase meter marked "Ing. Company Gas Purchase Meter," that line does not belong to Phillips. Do you know who does own that line, sir? A. I have always understood that Independent owned it.

Q. Could you tell me the approximate distance of that line? Let me ask it this way— A. I think it would be approximately a quarter of a mile.

Q. Could you tell me the approximate distance from the back pressure regulator to the Phillips Petroleum Company line separating the Gray plant camp and the Independent Natural Gas camp? A. Approximately 200 yards, I would say.

Q. Now the Independent Natural Gas line which carries the gas to the back pressure regulator, could you tell me the function of the back pressure regulator, sir? A. It controls the pressure on the plant.

Q. On what plant? A. On the Gray plant.

BLEED THROUGH

BLURRED COPY

[1134]

Q. You mean it does not allow pressure to come from, say, the Independent Natural Gas compressor station and does not allow the gas to back into Gray plant; is that right? A. No, sir, it is necessary to maintain a certain pressure on the plant to operate it, and regardless of what Independent might do if they were to stop those compressors, or something of the sort, that would tend to reduce the pressure in that line between Gray and the Independent compressor station and the regulators would not permit the pressure on the plant itself to be reduced.

Q. In other words, from the back pressure regulator to the Independent Natural Gas compressor station it might be a negative pressure in that line; is that what you mean? A. I can see that it could be.

* * *

[1146]

Q. Now, on those lines coming into the Hansford plant, Lines D, E and F, they come down and make a right angle on Exhibit 45A and then seem to come to a header. Is there a header there, sir? A. That is right.

[1147]

Q. Are there any meters at that point? A. No meters.

Q. Are there any valves on Lines D, E and F before they reach that header? A. I can't answer that, sir.

Q. Then off that header we have a 24-inch wet gas line to Hansford plant, another wet-dry gas line. Now, that line passes down and into the Hansford plant absorbers,

of which there are shown four. Is that a correct number, sir? A. That is correct.

Q. And the gas moving from the south into the plant, the southeast and west, in other words, from Line A, B and C, which is, in part, Texas gas, seems to join together just outside the plant fence to the south of the Hansford plant, is that right, sir? A. That is correct.

Q. They come together in a header there? A. That is correct.

Q. Are there any valves in those lines there, sir, before they are joined together? A. I am not sure about that, sir.

Q. All right, sir. Could you tell me the size of the lines, sir—well, first we see Line B joins Line C and then Line A joins what we might call B-C. We don't

[1148]

have any letter or designation on that line at all. Could you tell me what size line that is that A, B and C join together in and run across— A. When you are talking about A, B and C, now, you are losing me.

Q. There is A, B and C joined together. First B runs into C, then A runs into C. Could you tell me the size of that line as it crosses the plant? A. I believe it is a 24-inch line. I'm not positive, but I believe it is.

Q. And that line also passes directly into the Hansford plant absorbers, of which you have said there were four, is that not correct, sir? A. That is correct.

* * *

BLEED THROUGH

BLURRED COPY

[1157]

Cross Examination by Mr. Sparks

Q. Mr. Paris, turn to Exhibit 45-A, associated with the Sherman-Hansford plants. Now, the lines that are shown on that exhibit, Mr. Paris, the red lines are lines carrying raw gas; is that correct? A. That is right.

Q. And the green lines are lines carrying residue gas. A. That is correct.

[1158]

Q. Then there are some brown lines on the exhibit. Do you find those? A. Yes, sir.

Q. Mr. McAllister on Friday went over in detail with you the manner in which the gas, the raw gas, comes into the plant through the various lines and through the tie-overs from the sweet and mixed lines and certain of the gas is taken as sweet gas, which includes some of the mixed sweet and sour gas, does it not, through a bank of three scrubbers, sweet gas scrubbers, to the left of the flow sheet? Do you find that? A. That is correct.

Q. And the other gas which includes the gas from sour lines and also part of that from the mixed or center line, is taken through the sour gas scrubbers, shown as such on the left side of the chart. Is that correct? A. That is correct.

Q. And from the sour gas scrubbers raw gas goes through the treater marked as "Gas treater," with a block on the exhibit. At the gas treater the hydrogen sulphide is removed from the gas; is that right? A. That is correct.

Q. Then gas passes from the sour gas treater and passes through a bank of five meters and comes to a point or into a line shown on the exhibit which is joined by the sweet gas line from the sweet gas scrubbers. Do you find that point on

[1159]

the chart? A. That is correct.

Q. Does the treated gas and the gas from the sweet gas scrubbers come to a common header at that point? A. It does.

Q. And is it commingled at that point? A. It is.

Q. From that common header does the gas enter the absorbers at Sherman plant? A. It does.

Q. I notice that there are two banks, shown to be two separate sets of absorbers here, one shown to have five in it and the other five. Do all those absorbers actually take off of the same common header? A. They do.

Q. From the absorbers gas passes through a meter—the residue gas passes through a meter—which is at the discharge of each absorber? A. That is correct.

Q. Mr. Paris, what is the operation which takes place in the absorbers? A. The absorbers is the point where the absorption oil is contacted with the gas for the purpose of removing the gasoline hydrocarbons from the gas.

Q. How is that operation conducted?

[1160]

A. The gas, as indicated on the diagram, enters the lower part of the absorber and flows upward and out at the top.

BLEED THROUGH

BLURRED COPY

The absorption oil is piped into the absorber near the top and flows down, or counter-flows to the gas stream. In the absorber there are a number of what we call bubble trays which are there for the purpose of contacting the gas with the oil. The oil passes down over the bubble trays until it reaches the bottom and is what is referred to as saturated oil at that point. It has then absorbed the hydrocarbons from the gas that we take out of it.

Q. Is the oil that comes in at the top of the absorbers, and before it is contacted with the gas, normally called lean oil? A. That is correct.

Q. And after the oil has been in contact with the gas in the absorbers and comes out of the bottom of the absorbers, it is referred to as rich oil? A. That is correct.

Q. Meaning the oil which contains whatever hydrocarbons have been absorbed from the raw gas? A. That is correct.

Q. Does the absorption oil absorb only the heavy hydrocarbons which are desired for liquids, or does it also absorb some of the lighter hydrocarbons, such as methane and ethane? A. The absorption system, as we use it, is not entirely

[1161]

selective. I mean by that that we are not able to select and absorb only those hydrocarbons that we desire to keep in liquid gasoline, and some ethane is absorbed during the process.

Q. And some of all of the hydrocarbons contained in the gas which are heavier than ethane. A. That is correct.

[1162]

Q. Does the absorption process absorb into its oil all of the heavier hydrocarbons which you desire to retain as liquids? A. Of course, we attempt to design our plants where we can absorb as much of that material as possible, but I believe the economics of the situation controls that. I believe some of the heavier hydrocarbons are left in the gas after the absorption.

Q. In other words, is the absorption process as it is used by Phillips in its gasoline plants more and more selective of the heavier hydrocarbons in the gas as you move from the lighter end of the hydrocarbon range to the heavier end? A. That is correct.

Q. In other words, it absorbs a higher percentage of the pentanes, for example, than it does the normal butanes? A. That is right.

Q. And, of course, of the hexanes and pentanes? A. That is correct.

Q. These flow sheets do not depict the movement of the rich oil after it leaves the absorbers, do they? A. They do not.

Q. Not only this one but none of them that have been offered in evidence and from which you have testified? A. That is correct.

[1163]

Q. After the rich oil leaves the absorbers, I would like for you to trace it through the plant, describing the source of vapors resulting from the rich oil at the various points of equipment in the plant, and also the disposition of those

BLEED THROUGH

BLURRED COPY

vapors with regard to the Sherman plant. A. The rich oil leaves the absorbers and it flows to what we refer to as the flash tank. That is indicated on this diagram to the left of the small group of five circles just below the block indicating the gas desulphurizers, gas treater. At that point the pressure on the oil is reduced from an absorber pressure to approximately 100 pounds.

Q. And the absorber pressures here, you stated, were approximately what? A. Two hundred fifty, something in that order.

Q. And that reduction in pressure results in the creation of vapors? A. At that point, by the reduction of the pressure, the oil gives off some of the vapor.

Q. All right, now, where do those vapors go? A. Those vapors are returned to the inlet to the absorbers.

Q. Setting up a cycle, reflux cycle, is that right? A. No, I would not refer to it as reflux. The nature of the vapors off of the tank referred to as a flash tank is similar in nature to the gas from the field entering the

[1164]

absorber.

Q. Do you mean it is hydrocarbon composition and percentages of the various hydrocarbons? A. It is probably a little richer than the heavier hydrocarbons than the incoming gas from the field, but there isn't a sufficient amount of it there that we can recover it through compressing so we put it back through the absorber. That gas—I don't know how the chemists would refer to it, but it is a gas that is in solution with the oil or maybe some mechanical

entrainment there that carries it through, but it is what we would refer to as rather lean vapor. Therefore, it is put directly back to the inlet of the absorbers.

Q. Where does the remaining rich oil go from the flash tank? A. From the flash tank the oil then passes through a bank of heat exchangers.

Q. What are they used for, Mr. Paris? A. Of course, a heat exchanger in the distillation process, we are attempting to heat the rich oil and cool the lean oil that has already been through the distillation process and had the hydrocarbon vapors removed, so a heat exchanger is a shell and tube affair as we use it, where the rich oil flows through tubes, it is a cold oil at that point, and the lean oil coming back from the still,

[1165]

returning from the still, is hot, so we desire to heat the rich oil and cool the lean oil, so we pass the two oils together and the hot oil gives up its heat to the cold oil and we accomplish a heat transfer in the heat exchangers in that manner.

Q. Where does it go from the heat exchangers? A. From the first bank of the heat exchangers it goes into a second vessel indicated there, labeled primary vent tank.

Q. What is the purpose of that tank? A. In passing through the first bank of heat exchangers, the rich oil has picked up some heat and due to the increased temperature the oil gives off vapors, so to unload the heat exchange system the rest of the way through we vent it in a primary vent tank, remove the vapors that have been released, due to the increased temperature of the oil at that point.

BLEED THROUGH

BLURRED COPY

Q. Those vapors aren't vented in the air, are they? A. No, sir.

Q. They are metered out of the primary vent tank. Is that an operating meter? A. Just an operating meter is all, yes, sir.

Q. Where do the vapors from the primary vent tank go initially? A. They go to the tank indicated on the right of the

[1166]

group and labeled high stage accumulator.

Q. Let's leave them there for the moment and take up our rich oil again, and after it leaves the primary vent tank, where does the rich oil go? A. It flows through a secondary bank of heat exchangers. From the second bank of heat exchangers, into a secondary vent tank. It is vented again at that point for the same reason it was vented after passing through the first bank of heat exchangers.

Q. Now, the vapors that come from the primary vent tank and secondary vent tank, are they substantially richer in hydrocarbon content than those from the flash tank? A. Yes, sir. Each stage of venting is richer.

Q. In other words, the secondary vent tank, vapors from it, are richer than those from the primary vent tank? A. That is correct.

Q. And the vapors from the secondary vent tank pass through the make tank, is that correct? A. That is correct.

Q. Let's take up again the rich oil. Where does it move from the secondary vent tank? A. It moves from the secondary vent tank into a circle you see to the right of that and slightly below labeled Sherman plant petro-chem furnaces.

Q. What occurs in that furnace?

[1167]

A. At that point the furnaces raise the temperature up to the maximum needed for complete distillation or removal of the hydrocarbon materials from the rich oil.

Q. After the oil has been heated so as to discharge the vapors, the balance of the vapors, absorbed from the gas at the absorbers, are the two products still together as they come out of the petro-chem furnace? A. They are.

Q. Where do they move from that point? A. They move from the petro-chem furnace to what we refer to as the still.

Q. That is speaking of equipment that isn't shown on this chart, is that not right? A. That is correct.

Q. And one other question here, the movement we have been talking about of the rich gas and of the vapors is through pipe lines, except when they are in the vessels themselves, is that right? A. That is correct.

Q. What occurs in the still? A. The still is a vessel similar to an absorber, except smaller, and it has these bubble trays in it that we refer to as being in the absorber. The oil enters the top of the still or near the top.

Q. The oil and the gas vapors?

[1168]

A. The oil and the gas vapors, and flows downward through the still. Of course, at that point the vapors are being released. As the oil comes down to the lower part of the still, steam is injected at that point, just open steam, into

BLEED THROUGH

BLURRED COPY

the still. It serves the purpose of, as probably I can best describe it, to just kind of agitate the oil and cause the gasoline hydrocarbon vapors to release themselves from the oil.

[1169]

Q. At the bottom of the still we have the oil stripped of the gasoline vapors; is that right? A. That is correct.

Q. And that assumes the characteristic that is known as lean oil at that point; is that right? A. That is correct.

Q. And that lean oil is recirculated back to the absorbers to start the process all over again? A. That is correct.

Q. The vapors which have been stripped from the rich oil in the still, they come out over the top of the still? A. That is correct.

Q. And where do they go? A. They go through what we refer to as a dephlegmator. At that point any oil that may be in the vapors, or carried over with the vapors, is removed from the vapor and returned to the oil stream.

Q. In other words, the dephlegmator is for the purpose of knocking out any particles of oil which may flow over the top of the still so that they will not have absorption oil mixed in with them? A. That is correct.

Q. And the vapors then pass from the dephlegmator to where? A. To a set of cooling coils located up in the cooling

[1170]

towers indicated in the upper part of the draft. These coils are located at the tower with water spraying over

them. It cools the hot vapors and condenses the liquids, or the heavier portions of the liquids in that stream. Then the uncondensed vapors would turn to the group of five vessels, the fourth one from the left labeled "Make tank."

Q. In other words, the portion of the vapors which have been liquefied in the cooling towers and the remaining hydrocarbons which were still in the vapor stage are taken from the same line into the make tank where the liquids are accumulated in the bottom of the tank and the vapors are taken off over the top of the tank; is that correct? A. That is correct.

Q. Let us take the vapors from the top of the make tank, and, incidentally, the vapors from the secondary vent tank are also discharged into the make tank. A. That is correct.

Q. And whatever remains is a vapor. The make tank, then—and is delivered off the top of the make tank and through a control meter? A. Yes, sir.

Q. And into the high stage accumulator. A. That is correct, except it does not go direct into there.

Q. Where does it go, first?

[1171]

A. The vapors from the make tank and the vapors from the primary vent tank are picked up by a compressor that we refer to as a recompressor in the plant. It is compressed up to approximately 200 to 250 pounds; it passes through coiling coils located in this same cooling tower where those vapors are cooled in the same manner as the ones from the make tank. Then the condensate, or the uncondensed

BLEED THROUGH

BLURRED COPY

vapors are returned from that point to the high stage accumulator.

Q. The liquids from the bottom of the make tank are also dumped into the high stage accumulator? A. The liquids from the make tank are pumped into the high stage accumulator.

Q. Along with the liquids and vapor from the cooling towers that have been put through the recompressor? A. That is correct.

Q. Then in the high stage accumulator you have liquid accumulation in the bottom of the tank and still remaining vapors at the top of the tank; is that right? A. That is correct.

Q. Those vapors on the top of the high stage accumulator, what disposition is made of them? A. They are returned to the plant absorber inlet.

Q. And commingled with the raw gas coming in from the field and pass through the absorber? A. That is correct.

[1172]

Q. What disposition is then made of the liquids accumulated in the high stage accumulator. A. They are pumped through the fractionator.

Q. There is no piece of equipment shown on this map as a fractionator, but it is a vessel, is it not, with bubble trays in it? A. That is correct.

Q. And operates on the same principles as the still? A. That is about right, yes, sir.

[1173]

Q. The liquids taken to the fractionator, what occurs in the fractionator, as that process is carried on? A. If there is any ethane or liquid in the high stage accumulator that we do not desire to keep in the liquid gasoline that we transport to the Borger fractionator, it is separated from the main gas stream in the fractionator.

Q. Does the gasoline come in at the top or the bottom of the fractionator as the liquids come from the high stage accumulator? A. It comes in at some point up the column. I could not tell you exactly where.

Q. Is it contacted in these bubble trays with some substance or other? A. Pardon me?

Q. Does it come in contact with anything in the fractionator? A. Yes. We have some of the same material that we are using in the fractionator that is condensed overhead into a liquid and pumped back to the top of the column and serves as a reflux for the column. That is the only contact of any liquid that is made in the fractionator.

Q. Is heat applied in the fractionator? A. It is, in a reboiler section of the fractionator, which may be in the column or off as a separate unit.

Q. The fractionator at the Sherman plant, what hydro-

[1174]

carbons are taken off as a vapor from the liquids which are brought over from the high stage accumulator? A. Ethane is the only one that we do not desire to keep in the liquid gasoline. Possibly at times there is some propane being fractionated off also. That would depend, I

BLEED THROUGH

BLURRED COPY

would say, if we fractioned off propane that would probably take place in the absorption, in the absorbers, for reducing the Btu of the gas below the minimum permitted under the Michigan-Wisconsin contract. That would be the only reason I would know for fractionating propane off of the gasoline for replacement into the gas stream or residue gas stream.

Q. Is the Btu content of the overage from the fractionator greater than that of the residue over the top of the absorbers, assuming that you just fractionated through ethane? A. No, it would be lower, I would say, in that case.

Q. The Btu of the ethane is lower than the Btu of the methane over the absorber? A. No. If we assume that methane was the only thing that was left in the absorber it would be higher.

Q. Do you know which one of them is the higher? A. No, sir, I do not.

Q. There is a line on this exhibit with an arrow pointing to the residue gas line just above the absorbers at Sherman plant which says, "Four-inch Sherman Plant Fractionator Overhead." Do you find that line?

[1175]

A. Yes, sir.

Q. There is also a meter shown there? A. That is right.

Q. Does that line represent the line from the overhead fractionators which deliver into the residue gas the fractionator overheads at Sherman plant? A. It does.

Q. And is that fractionator overhead commingled with

the residue overhead from the absorbers? A. It is.

Q. Prior to delivery of residue gas which is delivered to Michigan-Wisconsin Pipe Line Company? A. That is correct.

Q. Do you know whether or not any Btu analysis has been made of the Btu content of the fractionator overheads at Sherman plant? A. No, sir, I do not.

Q. I am going to ask you to ascertain, if you can, whether that has been done, and if so what Btu is shown in regard to that fractionator overhead. You can do that during the noon hour.

Mr. Paris, your description of the flow of rich oil and the equipment used in obtaining the liquid hydrocarbons which are liquefied and saved as such at the plant, and the flow of the various vapors down through the high stage accumulator,

[1176]

is that equipment generally denominated the distallation equipment of a gasoline plant? A. That is correct.

Q. The fractionator is not ordinarily included within the concept of gas equipment, or is it? A. Well, it could or could not be. I never thought of it in that respect. It seems to me it treats with the gasoline after it has been distilled from the oil, therefore, I would say that it probably would rightfully not be a part of the distillation.

Q. The flow chart of the Hansford plant reflects a similar accumulation and disposition of a plant vapor recovery, does it not? A. That is correct.

Q. And the flow of rich oil and the processes by which the absorbed vapors are stripped from rich oil and liquefied

BLEED THROUGH

BLURRED COPY

and the vapors in the distillation system is the same in the Hansford plant as it is in the Sherman plant? A. That is right.

Q. And the fractionator overheads at the Hansford plant are also delivered into the residue gas stream from the absorbers to make up the gas that is delivered to Panhandle Eastern, is that right? A. That is correct.

Q. Will you turn now to Exhibit 45-B?

[1177]

A. Yes, sir.

Q. To the right of the exhibit is shown the 24-inch line labelled "Field Gas Plant." Do you find that point? A. Yes.

Q. You have already gone through the process of taking that gas through the absorbers and through the gas treater. Just to the left of the gas treater there is a take-off from that line which is marked "Six-Inch treated gas to reabsorber." Do you find that? A. Yes.

Q. That gas is delivered into the reabsorber, is it not? A. That is correct.

Q. With certain of the plant vapors? A. That is correct.

Q. In other words, some of that raw gas is commingled at that point with the vapors from the first flash tank and high stage accumulator and the vapors from the second vent tank, is that right? A. That is correct.

Q. Are those vapors passed through a recompressor before they are commingled with the raw gas from the six-inch line and introduced into the reabsorber? A. They are not.

Q. What is the difference between this reabsorber and the absorbers?

[1178]

A. There is not any difference, except that it is a smaller unit and operates at lower pressure than do the main plant absorbers.

Q. But mechanically it operates in the same manner as any other absorber? A. That is correct.

Q. The residue gas from the reabsorber, is any of it delivered to Panhandle Eastern? A. No, sir, it is not.

Q. The balance of the raw gas, after it passes through the gas treater, is then metered and then delivered to Panhandle Eastern. Do you know at what point that delivery is made? A. It is made to the suction header at the Panhandle Eastern compressor station.

Q. Do you know whether Phillips owns the line to their suction header? A. They do not.

Q. Do you know at what point Phillips' ownership of the line that is marked "20-inch treated gas to Panhandle Eastern" is owned by Phillips? A. Just that portion that is inside the Phillips plant.

Q. You mean inside the fence? A. Inside the Phillips plant fence, yes, sir.

Q. Then the Phillips gas, I believe you stated, is mingled with the Panhandle Eastern raw gas and put through the

[1179]

Panhandle Eastern compressors and delivered back to Phillips. Do you know the point at which Phillips receives that gas from Panhandle Eastern? A. At the fence line, the south fence line of the Phillips plant.

BLEED THROUGH

BLURRED COPY

Q. The south fence line of the Sneed plant? A. Yes, sir.

Q. Then that gas moves on this diagram north and makes a left angle turn to the west. At that point where it makes that turn, is anything added to that gas? A. There is.

Q. And what is added to the gas at that point? A. That is gas from the first vent tank, or vapors from the first vent tank, and the second flash tank.

Q. Those are the vapors that come off the rich gas in the course of the distillation process which you previously described as first vent tank and second flash tank. A. That is correct.

Q. I believe in the distillation system that you were describing at the Sherman plant, I do not believe there was a second flash tank, was there? A. No, there was not.

Q. How does the second flash tank enter into the distillation system at Sneed? A. The Sneed plant operates the absorbers at 500 pounds

[1180]

pressure and bringing from the 500 pounds down to the presure to carry on the heat exchanges in the distillation system, and instead of doing all the flashing at one point we do it in two different stages. It is a two-stage flashing, is what it amounts to.

Q. The second flash tank vapors are richer than those in the first flash tank? A. That is correct, yes, sir.

Q. How about the first vent tank vapors, are they still richer? A. It is richer.

Q. Those vapors are then introduced into the raw gas stream upstream from the absorbers, as shown on this flow

sheet? Do you find that point. A. Yes, sir, that is correct.

Q. Does all that gas come into a common header before the bank of six absorbers? A. It does.

Q. And is commingled at that point? A. It is.

Q. And after being run through the absorbers the remainder of the gas which is not absorbed into the absorption oil passes off the top of the absorbers; is that right? A. That is correct.

Q. Through a bank of six meters.

[1181]

A. That is correct.

Q. Then the flow chart shows there is another stream introduced into the residue gas from the absorbers which is labeled "Plant fractionator overhead." Is that an overhead from the fractionator which is similar to the one you described at the Sherman plant? A. Yes, sir.

Q. Do you know whether those fratcionator overheads contain anything except ethane? A. I would say in this case they do not.

Q. You would say they do not? A. That is right.

Q. From time to time do you know whether or not they also contain propane? A. Well, it would be possible, but I am not certain.

Q. Is there also collected with the residue gas another stream which is marked on the exhibit as being vaporized liquids. A. That is correct.

Q. What are those vaporized liquids which are introduced into and commingled with the residue from the top of the absorbers? A. That is gasoline after it has passed

BLEED THROUGH

BLURRED COPY

through the plant fractionator, a portion of which — I beg your pardon, it is not gasoline, it is fractionator reflux. It is not a finished gasoline. It is pumped through a vaporizer and added

[1182]

back to the residue stream from the absorbers.

Q. Do you know what the hydrocarbon composition is of the fractionator reflux which is vaporized and introduced into the residue stream? A. Not for certain. It is principally propane and possibly some butane.

[1183]

Q. Do you know whether or not the Btu's of that vaporized liquid is greater than the Btu's of the residue that comes off the top of the absorber? A. It is greater.

Q. Does it serve to decrease the Btu content of the total mixture of residue gas which is redelivered to Panhandle Eastern? A. It does.

Q. At what point does the redelivery of the commingled residue vapors and vaporized liquids to Panhandle Eastern take place. A. In the absorber outlet header.

Q. Is that the point where Phillips redelivers the residue to Panhandle Eastern? Did you follow my question? A. I probably missed the question, sir.

Q. In other words, I asked you the point at which redelivery is made to Panhandle Eastern of this commingled residue from the absorbers, fractionator overhead and vaporized liquids. A. At the Sneed plant fence, located south of the Sneed plant.

• • •

[1191]

Q. If you will turn to Exhibit 45A, I believe you stated that after the sour gas had passed through the gas treater and the sweet gas through the sweet absorber, that all volumes of gas processed in the plant came to a common header, where it was commingled before being processed through the absorbers? A. That is correct.

Q. Is the hydrocarbon composition of the raw gas in that header which is the commingled gas, processed through the plant different from the hydrocarbon composition of the residue gas as it is delivered to Michigan-Wisconsin Pipe Line Company at the meters shown near the northeast or upper left-hand corner of the chart, Exhibit 45? A. The question is is the hydrocarbon content different?

Q. The hydrocarbon content of the raw gas different from the residue gas that is delivered to Michigan-Wisconsin. A. It is.

Q. Now, Mr. Paris, is the hydrocarbon composition of the residue gas as it comes from the top of the absorbers shown on Exhibit 45A and before the overhead vapors from the fractionator are introduced into that residue from the absorbers different from the mixture of the two which is delivered to Michigan-Wisconsin? A. It is.

[1192]

Q. At the Hansford plant, is the hydrocarbon composition of the raw gas in the headers before it is taken in the absorber different from that of the ultimate residue gas which is delivered to Panhandle Eastern at the meters near the east side of the plant? A. It is.

BLEED THROUGH

BLURRED COPY

Q. Is the hydrocarbon composition of the residue gas from the top of the absorbers prior to the introduction into that stream of the overhead vapors from the fractionator at Hansford plant different from the mixture of the two which is delivered to Panhandle Eastern? A. It is.

Q. At the Hansford plant, Mr. Paris, does all of the raw gas from the lines which, I believe you said, were lines A, B, C, D, E and F on Exhibit 13, does all of that gas come into a common header and become commingled before it is processed through the absorbers? A. It does.

Q. Turn to Exhibit 45C. I believe on direct examination this morning you stated that the line, 20-inch line, from the southwest Gray County, was taken directly into the absorbers. I ask you whether or not the gas from that line is not commingled with the gas coming through the 20-inch line from Wheeler County as marked on the exhibit and with all of the gas which comes into the plant through the vacuum

[1193]

lines marked on the exhibit after the vacuum gas passes through the compressors before being processed in the absorbers? A. It does.

Q. Is the hydrocarbon composition of the commingled raw gas at the intake header of the absorber different from the hydrocarbon composition of the residue gas which is ultimately delivered to Independent Natural Gas Company? A. It is.

Q. Is the hydrocarbon composition of the residue gas off of the top of the absorbers at Gray plant prior to introduction into that stream of the plant vapor recovery of

a different hydrocarbon composition from the residue gas which is ultimately delivered to Independent Natural Gas Company? A. It is.

Q. I believe you stated this morning that it was approximately a quarter of a mile from the meters at Sneed plant which meter the gas that Phillips sells to Panhandle Eastern to Panhandle Eastern's compressor station. Do you recall that? A. Yes, sir.

Q. How far is it from those same meters to the plant fence, at which point, I believe you testified, the gas was delivered to Panhandle Eastern's line?

[1194]

A. Oh, I'd estimate 150, 175, yards.

Q. I'm not sure whether you testified to this or not Mr. Paris. Who owns the meters on Exhibit 45D at the point near the bottom of the exhibit where it says "meters (4) El Paso Natural Gas Company"? A. Which exhibit?

Q. That is 45D. A. They are owned by El Paso.

Q. Those are the delivery meters to El Paso, are they not? A. That is correct.

Q. I believe you have stated that Phillips Petroleum Company does not sell any of the gasoline as made at the several plants represented by, well, I should say Dumas, Sneed, Gray, Sherman and Hansford plants, but takes the gasoline as made through a gasoline pipe line to the Borger fractionator where it is further fractionated and processed, is that correct? A. That is correct.

Q. Does Phillips Petroleum Company, however, purchase gasoline as made from other gasoline plant operators in the Panhandle Field? A. Yes, sir.

BLEED THROUGH

BLURRED COPY

Q. Does that gasoline include, in some plants, butanes and propanes?

[1195]

A. It does.

Q. Within the limits fixed by the Btu requirements of the gas sales contract, and the Btu content of the raw gas from the field, does Phillips Petroleum Company have complete freedom in determining the gasoline extraction and liquid hydrocarbon production at the several plants we have been discussing? A. We do.

Q. And within those limits, do the requirements of the pipe line companies, such as Michigan-Wisconsin Pipe Line Company, determine the gasoline and liquid hydrocarbons which will be manufactured at the plants? A. Within those limits, they do not.

Q. And, in fact, does your gasoline extraction vary from time to time in the plants such as the Sherman plant? A. Yes; it varies.

Q. By that I mean the degree of extraction. A. Yes, sir.

Q.Do you have any control over the volume of casing-head gas which is produced from the wells to which you are connected and from which you take casing-head gas? A. None whatever.

Q. Who determines that volume? A. The operator of the wells, the producer.

Q. Is it affected by the oil proration schedules?

[1196]

A. Yes, it is.

Q. Does the casing-head gas produced with the oil and cannot be produced without the oil, or the the oil cannot be produced without it, I guess I should say? A. I don't know of any cases where casing-head gas or oil is produced without producing casing-head gas with it. There are instances where casing-head gas is produced when oil is not produced, but generally always in instances that I know of in a lesser volume than would be the case than if the oil were being produced.

[1197]

PRESIDING EXAMINER: Casinghead gas is produced exclusively from oil wells, is it not?

THE WITNESS: That is right.

PRESIDING EXAMINER: It is not produced from gas wells.

THE WITNESS: That is correct.

BY MR. SPARKS:

Q. What I meant to say is occasionally gas is produced along with the oil. A. That is right. I would say that as a rule, but when they are not producing oil there is some gas produced from casings regardless of whether oil is being produced or not, in some instances. In some places the oil fills up the well bore and sets gas off, but in other cases it does not fill up very much and some gas has to be produced, even though the well is not pumping or flowing, whatever it might be. If it is a pumping well, that would happen; if it is a flowing well, of course, it would not, unless it were flowing—

Q. I believe you stated at the present time aproximately 60 per cent of the residue gas from the Gray plant

BLEED THROUGH

BLURRED COPY

was delivered to Independent Natural Gas Company. Does that percentage and volume of gas delivered to Independent vary? A. It does.

Q. Is it more or less in the summertime than at present? A. The volume is less in the summer than it is at the present and through the winter months.

[1198]

Q. And is the percentage of the total less? A. It is.

Q. In the Sherman gathering system, for example, is there a variation in the pressure, the reservoir pressure, of the various wells? A. There is.

Q. Is there a variation in the pressure at the well in some cases and the working pressure in the line taking gas from the well? A. There is.

Q. How is that handled to maintain that pressure variation? A. I would say the largest part — that is what I intended to say, but I am not sure about that — the wells are prorated, of course, and to prevent the wells from over-producing they are pinched in and not allowed to produce wide open in all instances, and the pressure in the gathering system must be maintained sufficiently low that the lowest pressure wells can produce into the system. That is controlled by pinching back on all of the wells.

Q. And I assume that varies from time to time when various wells are put in and taken out, cut in or out of the gathering system? A. That is correct.

* * *

[1211]

MASON G. WALTERS

was recalled as a witness, after having been first duly sworn, was examined and testified further as follows:

Further Direct Examination by Mr. Purdue

* * *

[1213]

Q. Mr. Walters, did you prepare Exhibits 48 to 51, inclusive? A. I either prepared them or they were prepared under my supervision.

Q. As in the case of Exhibits 12 to 15, inclusive, did you first make drawings or sketches on a larger scale than these exhibits from maps and drawings of Phillips' facilities on a still larger scale which that company supplied? A. I did.

Q. Did you also put in on the drawings which you made certain line designations and sizes from vacuum and residue line maps supplied by Phillips Petroleum Company? A. Yes, sir, I did.

Q. Were the drawings which you made true and correct depictions on a smaller scale of the pipe line facilities shown on Phillips' maps? A. They are.

* * *

[1214]

Q. Then did you check Exhibits 48 to 51, inclusive, against transparencies of Phillips Petroleum Company furnished by that company? A. Yes, sir, I did.

BLEED THROUGH

BLURRED COPY

Q. Do the Exhibits 48 to 51, inclusive, reflect all the pipe lines shown on those transparencies? A. Yes, sir.

Q. Were the transparencies represented to you by the Phillips Company in the instance of the Eunice plant—in the instance of these four fields, that is, the Eunice, the Fullerton, the Goldsmith and the Crane fields, to be their most current transparencies? A. That is correct.

* * *

[1215]

MR. PURDUE: Mr. Examiner, we offer Exhibits For Identification 48 to 51, inclusive, in evidence.

* * *

MR. SPARKS: In other words, on Exhibit 48, have you shown all of the lines which were shown on the tracing and maps furnished you?

THE WITNESS: Yes, sir.

MR. SPARKS: Is that likewise true with regard to Exhibit

[1216]

49, which relates to the pipe lines at the Fullerton plant?

THE WITNESS: I tried to show on this diagram all of the pipe lines that are shown on the transparency.

MR. SPARKS: Now, on Exhibit 50, I notice that you have one line coming down from the north that runs off of your blocked out line of the sketch, the border line, and there is a cross line goes across the line from the north, is that right?

THE WITNESS: Yes, sir.

MR. SPARKS: Are those the only two lines that were shown on your sketch in that area?

THE WITNESS: Those are the only two that were shown on the transparency, that is right.

MR. SPARKS: I mean on the transparency.

THE WITNESS: That is right.

MR. SPARKS: Very well.

PRESIDING EXAMINER: Is there any objection to Exhibits 48 to 51, inclusive?

(No response.)

PRESIDING EXAMINER: Those exhibits are received in evidence.

(THE DOCUMENTS ABOVE REFERRED TO WERE RECEIVED IN EVIDENCE AS EXHIBITS NOS. 48 to 51, respectively.)

* * *

[1217]

HOWARD MARKLEY

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Purdue

Q. Where do you live, Mr. Markley? A. Odessa, Texas.

Q. Sir? A. Odessa, Texas.

Q. What is your position with the Phillips Petroleum Company? A. I am superintendent of the western district of the natural gasoline department.

[1218]

Q. How long have you held that position? A. A little over seven years.

BLEED THROUGH

BLURRED COPY

Q. How long have you been with the Phillips Petroleum Company? A. Almost 19 years.

Q. Almost 19. Will you, in a brief way, state the other positions you have held with the company before becoming superintendent of the western district of the natural gasoline department. A. I went to work as a laborer in 1932, and worked some as an operator, laboratory technician, and I was foreman of the gasoline terminal for a year, chief operator of the gasoline plant for a year.

Q. What plant. A. Wewoka plant in Oklahoma. I was in the engineering section in the Panhandle district for approximately three years, in the process engineering section in the Bartlesville office after that approximately a year, and was district engineer in the Oklahoma district for about four and a half years, and then went to Odessa as district superintendent.

[1219]

Q. As superintendent of the Western District — is it District or Division? A. District.

Q. As superintendent of the Western District of the Natural Gasoline Department, you have supervision over the operations of Phillips Petroleum Company in the Permian Basin. A. Only in the Natural Gasoline Department.

Q. Is the Permian Basin a large area in southwestern Texas and southeastern New Mexico? A. Yes, sir.

Q. Does your supervisory authority cover both the pipe line facilities in the fields and the operation of the gasoline plants? A. It covers the natural gas gathering systems and the gasoline plants.

Q. Will you specify the names of these gasoline plants and their locations? A. All under my supervision you mean?

Q. In the Permian Basin area. A. We have eight plants in the Permian Basin: The Crane plant near Crane, Texas; the Judkins plant near Penwell, Texas; the Goldsmith plant near Goldsmith, Texas; the Fullerton plant near Fullerton, Texas; the Seminole plant near Seminole, Texas; the Hobbs plant adjacent to Hobbs, New Mexico; the Lea plant adjacent to Buckeye, New Mexico, and the Eunice plant

[1220]

adjacent to Oil Center, New Mexico.

Q. Except for the Judkins plant, does the Phillips Company sell residue gas from these plants to El Paso Natural Gas Company? A. Yes, sir.

* * *

[1225]

Q. Referring to Exhibit 48, which is the diagram of the pipe line facilities of Phillips in the Eunice field, are the separators located at the ends of the small-sized lines shown on that map? A. Not necessarily exactly on the ends of those lines. In some instances they might be at some distance from the ends of those lines.

Q. You would say that those lines terminate at meters; is that correct? A. If this map is complete those lines would terminate at our meter station.

Q. At your meter stations. And then there would be lines extending thence to the separators? A. Ordinarily.

Q. I take it your answer would be the same in the case of Exhibits 49, 50 and 51. Would you refer to them, please.

BLEED THROUGH

BLURRED COPY

which show the pipe line facilities in the Fullerton field, the Goldsmith field, and the Crane field, respectively. A. If these maps are complete and accurate maps of our gathering system, why, the same answer would apply.

* * *

[1227]

Q. Does the gas flow to the plants under separator pressure, or how? A. In these four fields all the gas flows under separator pressure to the plants.

Q. So the pressure decreases somewhat from what it is at the separators before it enters the plants?

[1228]

A. Yes, sir.

Q. At the Crane, Goldsmith, Fullerton and Eunice plants, does Phillips compress the gas and run it through absorbers? A. Yes. We have compressors at each plant that handle wet gas and run the wet gas through absorbers at each plant.

Q. After the extraction of the gasoline and other liquid products from the gas processed in these four plants, does Phillips sell most of the residue gas to the El Paso Natural Gas Company? A. Most of it is sold to the El Paso Natural Gas Company.

* * *

[1229]

MR. PURDUE: Mr. Sparks, have you just produced some maps of the facilities showing the flow in the Eunice, Crane, Fullerton and Goldsmith plants?

MR. SPARKS: I have just completed them this afternoon, yes.

MR. PURDUE: And as I understand you they are somewhat more complete than Exhibits 45-E and 45-F and 45-G and 45-H of a similar nature which staff entered into evidence on Friday?

MR. SPARKS: That is correct. They show more of the detail of the gas flow than the other exhibits.

MR. PURDUE: I have not had a chance to examine these exhibits to which I have referred which have just been handed me. However, I have no objection to your introducing them in evidence as your exhibits.

MR. SPARKS: I would be glad to do so so that you may use them if you so desire in questioning the witness.

[1230]

If the Examiner please, I suggest that we have these flow sheets marked with the same corresponding exhibit numbers that were on the ones that the staff introduced. In other words, the Eunice plant would be 45-E-1 and appear in that position in the record, and then they would be together at that point.

MR. PURDUE: That is satisfactory with us, Mr. Examiner.

* * *

[1232]

PRESIDING EXAMINER: Do you wish to offer these exhibits?

MR. SPARKS: Oh, yes, sir.

PRESIDING EXAMINER: Is there any objection to Exhibits 45-E-1, 45-F-1, 45-G-1 and 45-H-1?

* * *

BLEED THROUGH

BLURRED COPY

PRESIDING EXAMINER: Exhibits No. 45-E-1, F-1, G-1 and H-1 are received in evidence.

* * *

[1269]

Q. Now, Mr. Markley, will you go ahead and by reference to Exhibit 45-G-1, describe the flow of the gas through the Goldsmith plant? A. The raw gas from the field comes in from the gathering system lines, these lines that we have been talking about, and passes through several inlet scrubbers. Five are shown on the sketch. Well, I see a total of six shown on the sketch.

MR. McALLISTER: How many are in the plant?

THE WITNESS: I'm sure that six is the correct number in the plant.

From those inlet scrubbers the gas goes into a compressor intake header. From the compressor intake header, the gas goes to the compressors, and from the compressors it goes to the compressor discharge header, and from the dicharge header we have two streams, one going to the three 50-pound absorbers and one going to the El Paso Natural Gas Company.

BY MR. PURDUE:

Q. Are the properties of the El Paso Natural Gas Company shown on the lower right-hand portion of the chart? A. Their plant is designated on the chart.

[1270]

Q. And is the gas metered before it goes to the facilities of the El Paso Company? A. It is.

Q. At the meter on the green line at the left-hand portion of the series of lines running in a northerly-southerly direction on the lower right-hand portion of the diagram? A. No, the stream of gas I have just described—

Q. I see, it is the red line. A. —goes through the left-hand red line on the sketch. It goes through three meter runs. From our 50-pound absorbers, the residue gas, which, of course, is of somewhat lower volume and character than the inlet, goes to a number of different places. One line shows residue return to the field. Another line shown delivers gas to the Sid Richardson Carbon Black Company through meters. Another line delivers fuel for the plant furnaces. Another line delivers fuel for plant boilers.

We come to another residue line that delivers gas to the injection compressors.

MR. McALLISTER: What do you mean by injection compressors?

THE WITNESS: The crude oil producers, some of the crude oil producers, in the Goldsmith field are reinjecting residue gas. We are supplying the compression service for that reinjection gas.

[1271]

MR. McALLISTER: You mean by that lift gas or is it repressuring gas or pressure maintenance gas?

THE WITNESS: Well, I'm not a production engineer, and I don't know what their exact definition for it might be. It is commonly called by the names you gave it, repressuring gas and pressure maintenance. We happen to

BLEED THROUGH

BLURRED COPY

be calling it reinjection gas at Goldsmith.

MR. McALLISTER: Well, it comes within that category. That goes back to them for use in maintaining pressure in the field to aid in the production of oil?

THE WITNESS: I understand that they return it to the reservoir from which the gas came, from which the gas and oil come.

MR. McALLISTER: What was that?

THE WITNESS: I understand they return the gas to the San Andres formation from which we obtain wet gas.

MR. McALLISTER: I mean there is an equal volume goes back or something of that order. It couldn't be identical to gas.

THE WITNESS: I don't know what the ratio of the volume of the reinjection to the volume of the original produced gas may be. It is appreciably less.

MR. McALLISTER: It is less than that produced from the field?

THE WITNESS: Yes, sir.

[1272]

MR. McALLISTER: In volume.

THE WITNESS: Yes, sir.

MR. McALLISTER: But you have no way of maintaining the identity of the gas through this plant, so it is a certain volume that goes back?

THE WITNESS: That is correct.

BY MR. PURDUE:

Q. Mr. Markley, you testified that the raw gas passes through three meters and enters the facilities of the El

Paso Natural Gas Company. Does the El Paso Natural Gas Company compress the gas there? A. Yes, sir. They compress the gas to 600 pounds or less and return it through the other red line which is labeled 600 pound wet gas from El Paso.

Q. Does the gas flow through two meters just after it leaves the property of the El Paso Company? A. Yes, sir.

Q. Proceed, please. A. Do you want me to continue with that stream?

Q. Yes, continue with that stream. A. The 600-pound gas goes through the 600-pound absorber and there is—

Q. (Interrupting.) How many absorbers are there there? A. One.

[1273]

Q. Just one. A. There is a marked change in volume and character of the gas in the 600-pound absorber. The residue from the 600-pound absorber is returned to the El Paso Natural Gas Company. It is cooled somewhat by a cooling coil which is not shown on this sketch. It is returned through the green line through the two meters shown in the lower right-hand corner of the sketch. To pick up the residue from our 50-pound absorbers again, I led some of it to the injection compressors. Some of it goes to our plant gas treater where hydrogen sulphide is removed and the treated gas is used for camp fuel and for engine fuel in our plant, and minor streams are shown there going to camps to the Ector Water Company and to the Ector County Utility Company.

The reinjection gas from the injection compressors is passed through a dehydrator and the major portion of it

BLEED THROUGH

BLURRED COPY

then is delivered to producers through the lines at the top of the sketch, one line labeled 1,100-pound gas to Devonian and others and the other labeled 1,100-pound gas to Phillips Petroleum Company. The rest of that dehydrated 1,100-pound gas is further compressed in the high stage injection compressor and leaves through a line labeled 1,500-pound injection gas to Phillips Petroleum Company.

We have a number of vapor streams in the plant. The vapors from the rich oil flash tank and the vapors from the

[1274]

condenstate flash tank and the vapors from the high stage accumulator and ordinarily the vapors from the fractionator all go to the reabsorber. The reabsorber residue is shown entering the residue from the 50-pound absorbers.

A line is shown here from a point between the make tank and the high stage accumulator leading to the compressor intake header. There are periods when vapors flow through that line to that intake header. It isn't a continuing stream, and they do not flow at fixed intervals.

MR. McALLISTER: Why isn't there a continuous stream?

THE WITNESS: The line is there to take care of vapors which during regular operations are handled by the plant removal compressors. We have four recompressors and when one or more of those may be down, we can't handle all of the vapor stream that flows from the make tank to the high stage accumulator, so at times when we can't handle it through the recompressors, we divert that stream to the compressor intake header.

* * *

[1301]

Q. Yes, all right. Mr. Markley, will you describe the flow of gas through the Crane plant and into the facilities of the El Paso Company? A. Yes, sir. The raw gas comes from the gathering lines through the several large diameter pipes we have been talking about through three inlet scrubbers shown on the sketch. The figure two is designated there after one scrubber in one instance, and in the other instance the figure one is designated after the scrubber. It comes from those two inlet scrubbers to the engine room, where it enters the gas compressors.

Gas is boosted there and leaves the engine room through another red line labeled 24-inch and goes through two meters to two absorbers. After passing through the absorbers, the residue gas goes to various points. We show towards the top of the sketch the three meters, metering three streams of residue gas. One is residue return to leases, the other is residue to the flare, and the other is residue for gas lift.

[1302]

Going back to the top absorber and taking another residue line, we find that it is over here past the middle of the sketch a way where it is labeled 20-inch, and at that point we have a brown line, which represents plant vapors, coming into the 20-inch. From that point the residue, composite residue or the combined residue, goes to the El Paso Natural Gas Company's station through two meters, which are shown outside the plant fence.

Other residue gas goes to the boilers for boiler fuel. Some then goes to the gas treater, where hydrogen sulphide

BLEED THROUGH

BLURRED COPY

is removed and that sweetened gas is used for various purposes. Some is delivered to the Humble Pipe Line Company's crude oil pumping station. Some is delivered to the Southern Union Gas Company, some to Texas-New Mexico crude oil pipe line pumping station and several streams are delivered to camps.

Treated gas is also used for fuel for the plant engines. We also have a connection that will permit us to use treated gas for fuel for the boilers.

We have some vapor streams over here shown in brown lines. Vapors from the primary vent tank are introduced to the raw gas before it enters the absorbers. The vapors from the secondary vent tank, the make tank and the fractionator feed tank are, after a combination there, introduced to the reabsorber and the fractionator overhead is also

[1303]

introduced to the reabsorber. The residue from the reabsorber is shown so it can go either of two ways, either to the El Paso Natural Gas Company, as I have described, or it can go to the boiler fuel line.

I believe that traces out all the lines shown on this sketch, sir.

* * *

[1311]

Q. Mr. Markley, in the instance of all these areas in the Permian Basin about which you have testified, namely, the Eunice, Fullerton, Goldsmith and Crane areas, is there a continuous uninterrupted flow of the gas from the well heads through the flow line separators, through the pipe

line facilities of Phillips Petroleum Company leading to the plants, through the respective plants, and into the meters and pipe lines of El Paso Natural Gas Company? A. That is a very long question and I think it should be broken down. I would have to answer it "no".

Q. In what respect is there not such a continuous uninterrupted flow? A. The flow of gas from the leases, the casinghead gas which we purchase is frequently interrupted.

Q. Where, at what point. A. Well, it is interrupted at the leases coming from the separators.

Q. Is the flow interrupted after it leaves the separators? A. Under normal operations it would not be.

Q. What would be the operations under which it is never interrupted? A. After it leaves the separators, you mean?

Q. Yes. A. Of course, in the case of line breaks or changes it would require our cutting the line and taking them out of

[1312]

service for repairs, say, or additions.

Q. Except for a particular line or facility being temporarily shut down, as for repairs, or for similar reasons which you have stated, is there a continuous uninterrupted flow of the gas from the separators through the pipe line facilities of Phillips leading to the plants, through the respective plants, and into the meters and pipe lines of El Paso Natural Gas Company? A. Ordinarily, except for those things that I mentioned, the flow would be continuous, and it would certainly not be constant. I do not know

BLEED THROUGH

BLURRED COPY

whether you mean uninterrupted by partial interruption or complete interruption, but there are quite sharp fluctuations in the flows of gas in those lines and into the plants.

Q. The flow goes on seven days a week, 24 hours a day, does it not? A. Not all the flow from the separators, and the flows in the lines would depend on whether or not all the separators to which those lines are connected are out of service or not. There may be times when appreciable sections of the field, if you include oil and gas production, might be stopped, and it might stop the flow through at least a portion of our gathering system.

Q. But except for the times and periods when the oil production at the wells leading to a particular separator

[1313]

is stopped the flow is continuous and uninterrupted from those separators on? A. Except for those times when we have emergency repairs or reconstruction, I think that is true.

BY MR. McALLISTER:

Q. Whatever gas is flowing to El Paso represents an uninterrupted continuous flow from whatever wells it is produced in association with oil? A. Yes, sir.

BY MR. PURDUE:

Q. And there is a continuous and uninterrupted flow of gas to the El Paso Company, is there not? A. No. There are times when we have to shut our plant down and do not deliver gas. When we have an emergency shutdown naturally there is interruption of flow. I could not say it was continuous.

Q. But except for those emergency periods the flow is continuous and uninterrupted to El Paso. A. *Well, they have down time, too, of course. Except when the time when they are down or we are down or the volume of gas produced in the field doesn't leave sufficient residue to sell to them, why, it would be continuous. There are times in extremely cold weather at some points when we do not have enough gas coming through the plant to sell El Paso any.

Q. Those times are infrequent, are they not?

[1314]

A. Well, yes, I would say they are. They might occur — that particular instance might occur once or twice a year, usually when El Paso needs the gas the worst.

Q. Mr. Markley, I wish you would clear me up on the matter of the flow of gas from the wells to the separators at such time as there is production of oil at the particular wells leading to a separator as the flow of gas continues uninterrupted from the wells to and through the separators. A. Not always, sir. There are times when the oil and gas producer runs what he calls a test, various tests, and they set the test separator and will produce the oil and gas through that test separator and cut out the separator from which we take gas.

BY MR. McALLISTER:

Q. He flares the gas there? A. He releases it to the air.

Q. He vents it or flares it. One is leaving it flow to

---

*[Note correction at R. 1881.]

BLEED THROUGH BLURRED COPY

the air freely, and the other is to light a match to it and let it burn. It is one or the other. A. That is right.

PRESIDING EXAMINER: You are speaking now of individual wells, are you not?

THE WITNESS: Individual wells or individual leases, yes, sir.

PRESIDING EXAMINER: And while those particular wells may be

[1315]

shut down there is still a continuous flow of gas from other wells through the plant into the El Paso lines.

THE WITNESS: That would be ordinarily true, yes, sir.

* * *

[1341]

Q. The residue flare occurs when? A. It occurs when we have more gas coming into the plant than we can dispose of through our sales outlets. Well, that would be the determining factor, when we cannot get rid of all the residue, why, we will have to flare it if we cannot sell it.

Q. Do you flare it or just vent it? A. We flare it.

* * *

Q. What is the largest amount that you flared in any one day, as you recall it, since January 1, 1951? A. Well, since January 1951, there have been times when the El Paso Company was down and we flared all of our residue except that used for lease use and our own fuel needs.

* * *

[1344]

Q. I am not talking about the average. What I am trying to get at: Would there be in some days, relatively every month throughout the year, when there would be substantial volumes flared? A. Some one day, say, during every month?

Q. Yes. A. That is altogether probable, because the El Paso Natural has frequent shutdowns of all or part of their equipment, and when they are down we have to flare residues.

Q. Would that same condition apply to the other plants, Eunice, Crane and Goldsmith?

[1345]

A. Yes, sir.

* * *

[1372]

Examination by Mr. Torkelson

* * *

[1379]

Q. Again, you said that there were about 730 wells in the Crane area? A. That is right.

Q. Some of these wells are owned by people other than Phillips? A. Practically all of them are. Phillips has, oh, very few. I think only two leases, and perhaps not as many as eight wells.

Q. Could you give me just a general proportion that come from wells owned by Phillips and that that comes from

BLEED THROUGH

BLURRED COPY

wells owned by other people? A. Well, I doubt if over one or one and a half per cent of the gas produced in the McElroy field and coming to Crane plant is produced by Phillips. I don't know, it is a very small amount.

Q. And the balance comes from wells owned by someone else? A. Yes, sir.

* * *

[1380]

Cross Examination by Mr. Sparks

Q. Mr. Markley, let us go back to the wells.

Except for wells which have a casinghead, does the gas come up through the tubing in solution with the oil? A. Yes, sir.

Q. On those wells which have casingheads on them the so-called casinghead gas comes between the tubing and the casing? A. Yes, sir.

Q. Then there is a connection at the top of the well, whether it is a well with or without casinghead, is that right? A. Yes.

Q. If it is a well with a casinghead is the casinghead gas introduced into the same line with the oil and the gas which is in solution in the oil? A. It often is that way; if you bring the connection off the casinghead to the top of the well, why, they will pipe it back into the flow line between the well and the separator. By the flow line I mean the line that carries the oil and the gas from the well.

Q. Those flow lines are connected to the wells and they run from there to the separator? A. Yes, sir.

[1381]

Q. And they carry both the oil and the gas? A. Yes, sir.

Q. Are the separators located on the lease on which is located the wells from which the oil is produced? A. They are always so located in that area.

Q. Is there ever more than one separator on a single lease? A. Quite frequently.

Q. Is there often more than one well connected to a single separator? A. Yes, sir.

Q. If the lease has wells on it which produce from more than one producing formation is there a separate separator for each producing formation? A. There is.

Q. And does that situation exist in numerous instances at, for instance, the Goldsmith area? A. Yes, it does.

Q. May there be also on the same lease more than one separator, even though the wells on the lease are producing from only a single producing formation? A. Yes. That frequently happens and frequently exists.

Q. Would you describe what a separator is and the point on the separator where the flow line ordinarily connects?

MR. McALLISTER: That is f-l-o-w, flow line?

[1382]

MR. SPARKS: Yes. That is the line that carries the oil and the gas from the wells to the separator.

THE WITNESS: The purpose of the separator is to effect a separation of the oil and gas. The separator ordinarily is a vertical cylindrical vessel and you have, perhaps, an arrangement of baffles or pipes which are designed to

BLEED THROUGH

BLURRED COPY

help the gas and the oil separate and to force a reasonable separation.

BY MR. SPARKS:

Q. And also any water that may come in there? A. And any other liquids, water that may be mixed with the oil, too.

The flow line bringing the oil and gas is ordinarily connected into a verticle separator at the point in the middle or somewhat above the middle of one side of the vessel.

Q. In the areas which the Goldsmith, Crane, Eunice and Fullerton plants are located, does the lease operator own and operate the flow lines? A. Yes, sir.

Q. Does he own and operate the separators? A. Yes, sir.

Q. Is there a connection on top of the separator for a line which takes off the gas after it has been separated from the oil? A. Yes. At the top of the separator the gas as separated

[1383]

within the separator comes off. The oil is removed from the separator in a connection at the bottom and the water, if any, is removed from the bottom connection, too, of course.

Q. Prior to the time when Phillips connects for the purpose of taking casinghead gas — and I am speaking of all this gas that is produced with oil as casinghead gas because it is legally so defined in Texas, although it may come through tubing in solution with the oil as distinguished from that coming between the tubing and casing

as casinghead. So when I speak of casinghead gas I mean any gas that is produced from an oil sand and is produced with oil. I understand that.

MR. McALLISTER: You mean in solution with the oil?

MR. SPARKS: If it is produced from the oil sand and the same producing horizon as the oil and is produced with the oil, that is casinghead gas, yes.

MR. McALLISTER: The same solution, there may be some free, but it is the production of oil that comes out through the same stream, the same well. Is that right?

MR. SPARKS: That is right, although casinghead gas literally comes between the tubing and the casing and is not in solution with the oil at least at that point.

MR. McALLISTER: At that point it is not. I was just trying to see if we could get some understanding here that it is not the type of gas that is produced from an oil sand but is relatively produced from a dome and is an entirely

[1384]

different thing.

MR. SPARKS: I am not speaking of that, no.

BY MR. SPARKS:

Q. Prior to the time Phillips makes its connection to take casinghead gas, is it customary for the producer to lay his flow lines and set his separator tank, Mr. Markley? A. Yes, sir.

Q. Does he also build a vent line from that tank? A. That is the regular practice.

Q. Does that vent line take off from the top of the

BLEED THROUGH

BLURRED COPY

tank? What purpose does it serve? A. Well, it is to dispose of the gas, get it out and away from the separator to a relatively safe point. That is done by bringing a line from the top connection of a separator out and it comes down to the ground and may go into the ground, and it may be left on top of the ground. Then it would extend out a way from the separator a matter of, oh, 20 or 100 yards, depending upon the whim, perhaps, of the producer. There he will erect a riser on the line and support it with guy wires, ordinarily. Through that line and that riser the gas will be vented. He will have in the horizontal portion of that line on the ground, usually, a valve which will serve to hold a constant pressure on the separator and the gas is relieved through that valve.

[1385]

Q. Where does Phillips ordinarily connect with its line in order to take gas from the producers; in the areas that are covered by the Exhibits 48, 49, 50 and 51? A. We will connect to that vent line that the producer has built. We connect at the point between the separator and the back-pressure regulator.

* * *

[1395]

PRESIDING EXAMINER: The answer will have to be confined to that which comes under his immediate supervision and observation; otherwise, I think, the witness could not be allowed to testify.

BY MR. SPARKS:

Q. Will you so confine your answer, Mr. Markley. A. Natural gas as gathered into the plant in the western district, Goldsmith, Eunice, Fullerton and Crane contains hydrocarbons. I will list them in the order of their increasing density:

Methane, ethane, propane, isobutane, normal butane, isopentane, normal pentane, isoethanes, normal ethanes, isoheptanes, normal heptanes, iso-octanes and normal octanes, and isononanes and your normal nonanes, isodecanes and normal decanes, and a long chain of other hydrocarbons that occur in lesser increasing amounts.

Q. Does the natural gas also often contain other elements in the hydrocarbon series?

MR. McALLISTER: I object, Mr. Examiner. That is not within the ruling of the Examiner.

MR. SPARKS: I am speaking of the gas which comes under

[1396]

his supervision.

MR. McALLISTER: Now, Mr. Examiner, does it often contain them? Where are we going? We are just going down the road where we are going to have to go back and spend hours correcting something that should have been in the record on the basis of actual analysis. All we are doing is prolonging and making more difficult a competent, realistic, understandable, actual record of what transpires. I renew my objection to this line of questioning so as not to encumber this record.

PRESIDING EXAMINER: The objection is overruled.

THE WITNESS: The natural gas in the four plants

BLEED THROUGH

BLURRED COPY

in question contains in addition to the hydrocarbons I have listed nitrogen, carbon dioxide and hydrogen sulphide and water vapor.

* * *

[1425]

Q. And all of those vapors are vapors from the distillation system which have been absorbed into the absorption oil as it passes through or over the raw gas in the absorber? A. That is true.

Q. What is the volume of the reabsorber residue which is introduced into the absorber residue that goes to El Paso?

* * *

A. That volume averages approximately 1,300,000 cubic feet per day.

BY MR. SPARKS:

Q. I believe you already stated in your direct examination the approximate volume of the composite residue gas which is delivered to El Paso, have you not? A. Yes, sir.

Q. Just repeat that.

[1426]

A. Approximately 80 million feet per day, currently.

Q. What is the Btu content of the reabsorber residue which is commingled with the absorber residue and the composite delivered to El Paso? A. The Btu content of the reabsorber residue is about 1,130 Btu per cubic foot. The Btu content of the composite residue delivered to El Paso is about 1,050 Btu per cubic foot.

Q. Is the hydrocarbon composition of the absorber resi-

due different from the hydrocarbon composition of the reabsorber residue? A. Yes, sir.

Q. Is the hydrocarbon composition of the absorber residue and its Btu content different from that of the composite residue, including the reabsorber residue? A. It is.

Q. Would you now turn to Exhibit 45-F-1, the flow sheet covering the Fullerton plant. A. I have it.

Q. All of the raw gas processed in that plant is taken through the compressors, the raw gas compressors? A. It is.

Q. Does it come into a common header? A. Yes, sir.

Q. Before taken into the compressors?

[1427]

A. Yes, sir.

Q. Is there a common header on the discharge side of the compressors? A. There is.

Q. Is the gas in the field commingled at each of those points. A. Yes, sir.

Q. I notice that there are five absorbers at the Fullerton plant. Is there a common residue discharge header on the discharge side of those absorbers? A. Yes, sir.

Q. So that the residue gas from the various absorbers is again commingled in that header? A. Yes, sir.

Q. I notice on this flow sheet that the various plant vapors which are finally accumulated in the high stage accumulator are delivered into the raw gas upstream from the absorbers, is that correct? A. Yes, sir.

* * *

[1463]

Q. Mr. Markley, I ask you to look at Exhibit 48. A. I have it.

BLEED THROUGH

BLURRED COPY

Q. By what name are the lines which collect gas from the producers and deliver to the Eunice plant known? A. Wet gas gathering lines.

Q. Is that designation applied to the large diameter sized lines up to the 24-inch, I believe, in this particular case, which extend from the plant in diminishing size as they go farther out into the field, as well as the smaller lines which connect to individual separators? A. It is.

Q. Are those lines commonly called gas gathering lines in your day-to-day operations in the field? A. They are.

Q. Is that the name which is commonly applied to lines collecting gas from wells or separators of producers and

[1464]

delivering it to gasoline plants? A. Yes, sir.

MR. McALLISTER: You are referring to the ones which you operate?

THE WITNESS: The ones I operate and the ones others operate.

BY MR. SPARKS:

Q. Are there also in the Permian Basin area in which you operate plants for Phillips Company gasoline plants of other companies? A. Yes, sir.

Q. Will you name some of them? A. Shell Oil Company, the Skelly Oil Company —

Q. Can you name a plant or two? A. The Shell Oil Company's TXL plant, Odessa Natural Gasoline Company's Odessa plant, Stanolind Oil and Gas Company's North Cowden plant, Stanolind Oil and Gas Company's Fullerton plant, the Shell Company's two plants in the Waltham field, and

the Warren Petroleum Company's Monument plant, the Sid Richardson Gasoline Company's Keystone plant, the Cabot Company's plant near Kermit — I do not know what they call the plant — the Gulf Oil Company's Eunice plant. Those are the ones that are closest to our realm of operations. There are other plants in the Permian Basin that are further out from those we operate.

[1465]

Q. Are there lines at those plants which collect gas from the wells or separators of producers and deliver to the gasoline plants? A. I cannot speak to my knowledge of all the plants I mentioned, but the majority of them I know that they have separators and gas gathering lines and that they have gas gathering lines connected to producers' separators.

Q. As to the ones to which you have knowledge, are those lines spoken of by the operators as gas gathering lines? A. They are.

Q. I call your attention to Exhibit No. 49, which is a diagram of pipe line facilities at the Fullerton plant, and ask you by what name are the lines which Phillips operates and through which it collects gas from the separators of producers and delivers it to the Fullerton plant now? A. They are known as gas gathering lines.

Q. And does that terminology apply to all of those lines, including the larger diameter lines that lead into the plant? A. It is.

Q. I now direct your attention to Exhibit No. 50, which is a diagram of the pipe line facilities at the Goldsmith

BLEED THROUGH

BLURRED COPY

plant, and ask you by what name are the lines known as through which Phillips Petroleum Company collects gas from the separators of the producers and delivers it to the plant? A. They are known as gas gathering lines.

[1466]

Q. Does that terminology apply to all of such lines, including the larger diameter lines that lead into the plant? A. It does apply.

Q. I call your attention to Exhibit No. 51, which is a diagram of pipe line facilities at the Crane plant, and ask you if the lines through which Phillips Petroleum Company collects gas from the separators and producers and delivers it into the Crane plant are not also known as gas gathering line. A. They are so known.

Q. And that terminology is applied to all of said lines, including the larger diameter lines that lead into the plant? A. It is.

* * *

[1473]

Redirect Examination by Mr. McAllister

[1486]

Q. Do you make any Btu analysis of the gas, the raw gas, coming in over each of the lines leading into the plant? A. Of each of the lines coming into the plant?

Q. Yes. A. No. It would be very unusual for us to sample the individual gas gathering lines coming into the plant.

Q. With respect to the gas from individual leases, where do you make the tests to determine the Gpm content

of the gas from various leases? A. We make those tests from the connection on the meter setting.

Q. The meter setting where? A. The meter setting on the line coming from the separator.

Q. How often do you make those tests? A. Every three months.

Q. Every three months. Well, then, the lines coming into the plant, you make no tests as to the Btu content or the Gpm content in the gas that comes in by individual lines and before those lines join at the common header, is that right? A. No, sir, we wouldn't test those individual lines.

[1487]

Q. Where do you maintain pressure gauges to determine the pressure of the gas in those individual lines that lead into the plant? A. Do you mean close to the plant?

Q. You told us all morning about the pressure of the gas in the lines that come into the plant. Now, where do you measure that? A. We measure it on the compressor intake header or headers, as the case may be.

Q. That is a composite pressure, that wouldn't give you the pressure on individual lines, would it? A. Well, on the 50-pound gas at this plant—

Q. No, but I'm not talking about that. That is something entirely different from the normal line, isn't it? That 50-pound line doesn't go into the common header that we have been talking about from the other lines. A. It doesn't go into the engine intake header, no.

Q. We are talking about the line that you say you measure the pressure at the common header, and I have

BLEED THROUGH

BLURRED COPY

asked you where do you determine the pressure on the individual lines as they come into the plant and before they join the common header. A. We have pressure connections out at the scrubbers on the gathering lines.

Q. On each individual line as it comes in?

[1488]

A. I couldn't assure you we have one on each line as it comes in, no, sir.

Q. Well, each line operates as a separate entity, does it not? A. We don't consider them—we bring them all together. They are all part of the system.

* * *

[1541]

PRESIDING EXAMINER: Please come to order.

I have received an order of the Federal Power Commission dated April 16, 1951, and issued April 17, 1951, granting the motion of Phillips Petroleum Company to limit the issues in this proceeding, in this hearing.

The order is a rather long one, and I will not undertake to read all of it, but I think that I should at least read into the record at this time the ordering clauses of that order. I now quote:

"The Commission ORDERS:

"A. The matters to be presented at the public hearing now in progress shall be only those relevant to the following issue set forth in the Commission's order of investigation issued October 29, 1948, to wit:

"Whether Phillips Petroleum Company is a 'natural gas company' within the meaning of the Natural Gas Act.

"B. A public hearing be held upon the remaining issues set forth in the Commission's order of investigation issued October 29, 1948, at a time and place to be fixed by further order of the Commission.

"C. The motion to limit issue filed herein by Phillips Petroleum Company on March 27, 1951, is granted

[1542]

to the extent herein ordered, and in all other respects is denied. By the Commission. Commissioner Buchanan dissenting."

• • •

[1545]

HOWARD MARKLEY

resumed the stand, and having been previously duly sworn, was examined and testified further as follows:

Redirect Examination (Resumed) by Mr. McAllister

• • •

[1555]

Q. What are the orders of the railroad commission of Texas which control or govern the—I said govern—or specify the circumstances under which you may flare gas from any one of these three plants in Texas that we have been

BLEED THROUGH

BLURRED COPY

discussing? A. The commission issued cease-flare orders, which applied to McElroy Pool, Goldsmith, and Fullerton. The orders are a little bit ambiguous as to what the gasoline operator is in if he has to flare gas. I don't know what position we are in if we flare gas at the plant as far as violation of the commission's order is concerned. If the producers deliver the gas to us we take it. If we have to flare it, we flare it.

Q. And you don't know whether you are complying with the rule of the Railroad Commission or not, is that it? A. I am sure that we are. I understand that we are. We have been assured by the Commission representatives that we have not done anything that we will be criticized for or that they consider a violation.

Q. I mean, in other words, your rule is this, if the producers produce oil and gas in association with that oil, and that gas comes to you and the total volume at any time is in excess of that which you can dispose of as residue gas of the gasoline plant to the connections to which you normally deliver it, then that excess may be flared, is that the rule that you follow?

[1556]

A. It is flared, yes, sir.

Q. What is that? A. It is flared.

Q. I mean is that the rule? You flare the gas if you have no immediate outlet for it? A. Yes, sir.

Q. And it is that rule that determines when you will flare and when not? A. Well, if we have more gas than we can handle, we flare it.

Q. Do you make any report— A. (Interrupting.) It is just a practice, not a rule.

Q. Suppose you flare five hundred million out of a plant each day—I don't say that you do presently—would you discontinue doing that day after day or would you be under any obligation other than this GP-1 report at the end of the month? Is that the only report you would be under obligation to make to the Railroad Commission, or would you make a special report of some kind saying the production is so much that we must flare, say, five hundred million cubic feet of gas per day, just what would you do? A. I would report it on the GP report for that month.

Q. And nothing else? A. No, sir.

• • •

[1562]

Examination by Mr. Torkelson

Q. Mr. Markley, you are, of course, an employee of Phillips Petroleum Company? A. I am.

Q. Prior to the time that you took the stand as a witness in this proceeding, you discussed your proposed testimony with the lawyers of Phillips Petroleum Company, did you not. A. I did.

Q. And you have discussed your testimony since the time you were first called as a witness during recesses

[1563]

and noon lunches and during the course of the evenings? A. Yes, sir.

BLEED THROUGH

BLURRED COPY

Q. And in the course of that discussion the significance of the word "gathering" insofar as it affected the particular proceeding now before this Commission was explained to you, was it?

• • •

[1564]

A. It was not.

BY MR. TORKELSON:

Q. Was the term gathering discussed? A. I was asked what I called the lines, the wet gas lines, what we called them in the field, and I explained that we called them gas gathering lines.

Q. Have you ever read the natural gas act? A. No, sir.

Q. You have no idea as to the significance of that term as applied to that act? A. I am aware there must be a lot of significance applied to it from all the conversation about it, but I don't know what the significance is.

Q. You say there was a considerable conversation about it? A. I told you what was said, sir.

• • •

[1568]

Examination by Mr. McAllister

Q. Have you ever made any study to determine what in truth might be gathering or transmission or field or lease lines lying within the entire areas from which gas is collected through these four plants that we have been discussing, the Crane, the Eunice, Goldsmith and Fullerton plants? A. The question was pretty long. I missed the first part of it.

Q. The gist of it is have you made any study to determine how each of these lines ought to be classified? A. No. It isn't a matter of a study procedure. It is just a matter of practice that has existed through all my experience in the industry, Mr. McAllister.

Q. I was just asking you if you made a study to determine that. I mean you have just picked it up and used it as a matter of course, because that is what the lines are referred to in your day to day operation, is that right? A. Yes, sir.

Q. And it is because of that general use of the term that you have used it here, is that right? A. Yes, sir.

[1569]

Q. And you have made no study to determine whether or not it is in truth right according to some definition that someone might lay down? A. We know—

Q. Just answer the question. I mean it isn't based upon any study which you have made? A. No, sir, it is not.

Q. You don't know of any study that has been made of that character, do you? A. No.

MR. McALLISTER: That is all I have.

PRESIDING EXAMINER: All right, Mr. Sparks.

Recross Examination by Mr. Sparks

Q. Mr. Markley, in reviewing the facts with you concerning what you might be called upon to testify to in this proceeding, did I ever tell you how you should answer any question that might be put to you? A. You have not.

* * *

BLEED THROUGH

BLURRED COPY

[1576]

GEORGE C. ROTH

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Joffee

Q. Will you state your name, please? A. George C. Roth.

Q. Will you spell it? A. R-o-t-h.

Q. What is your occupation? A. I am assistant to the operating manager of the Cities Service Gas Company.

Q. You have been subpoenaed to appear here as a witness on behalf of the City of Kansas City, Missouri, in this proceeding? A. I have.

Q. Are you familiar with the pipe line system of Cities Service Gas Company? A. I am.

Q. And particularly in the State of Oklahoma? A. I am.

Q. Mr. Roth, are you also familiar with the purchases of gas made by Cities Service Gas Company in the State of

[1577]

Oklahoma? A. Yes.

Q. Does it purchase gas from Phillips Petroleum Company at any other place on the Phillips system? A. No.

Q. Will you explain just where Cities Service Gas Company does purchase gas from Phillips Petroleum Company? A. The Cities Service Gas Company purchases gas from

the Edmond field, the Hunton unit, of which Phillips Petroleum Company is a member.

Q. The Edmond field is located in Oklahoma County? A. Yes.

Q. And the purchases made by Cities Service Gas Company are made in fact from Phillips Petroleum Company, isn't that true? A. No, the gas is bought from the Edmond unit of which Phillips Petroleum Company is a part or participant.

Q. Do you pay your money to Phillips or to someone else? A. We pay Phillips.

Q. You pay your money to Phillips Petroleum Company? A. Yes.

Q. For all of the gas that you acquire from the Edmond unit, is that correct? A. That is correct.

[1578]

Q. Do you know of the exact interest which Phillips Petroleum Company has in the Edmond field unit? A. My information is that it is about 19.6 per cent.

Q. That is based on the records of your company, Mr. Roth? A. Yes, sir.

Q. Where does Phillips Petroleum Company or the Edmond unit deliver the gas to you? A. At the discharge of the West Edmond plant and the Hunton plant and the Trindle plant.

Q. Do you have information as to the amount of gas which was delivered to Cities Service Gas Company at those points in 1948, '49 and 1950? A. Yes, sir.

Q. Will you give them, please? A. In 1948, Cities

BLEED THROUGH

BLURRED COPY

Service Gas Company received from the so-called West Edmond plant 25,876,651 Mcf; in 1949 from the same plant, 29,993,377 Mcf; in 1950 from the same plant, 30,058,127 Mcf; there was no gas received from the Hunton or Trindle plant during 1948 and '49. In 1950, the Cities Service received from the Hunton and Trindle plants 6,495,704 Mcf. That is on a 16.4 pounds pressure base.

Q. At what prices were these respective quantities of gas sold or delivered to the Cities Service Gas Company?

[1579]

A. I only have the average prices for the year. 1948, 5.8 cents; 1949, 6.2 cents; 1950, 6.4 cents.

Q. Mr. Roth, the gas is metered to Cities Service Gas Company at what pressure? A. The gas is metered at delivery pressure, approximately 500 pounds pressure.

Q. And after entering the Cities Service Gas Company's pipe line at the Edmond field plant, will you then trace the flow of the gas from that point? A. You mean specifically as to volumes or generally, Mr. Joffee?

Q. Generally as to volumes and the approximate amount of volumes as best you can, Mr. Roth. A. From the West Edmond plant, approximately 16 million cubic feet per day go directly to Oklahoma Natural Gas Company's line. Approximately 28 million per day goes into the Cities Service Gas Company's 10-inch line, which feeds into the Oklahoma City-Blackwell 20-inch line. Approximately 41 million cubic feet per day feed into a 12-inch line to Drumright compressor station. From the Hunton and Trindle plants, approximately 29 million cubic feet per

day feeds through 8- and 12-inch lines into the Oklahoma City-Blackwell 20-inch line. Of the gas that feeds into the Oklahoma City 20-inch line, approximately 30 million per day is later delivered through a 16- and 12-inch

[1580]

line to Drumright station. I believe that gives the disposition of the Hunton gas.

[1581]

Q. Now, from the Drumright station, in what direction does the gas flow? A. North, from Drumright to the general system, extending into Kansas and Missouri.

PRESIDING EXAMINER: Where is the Drumright station located?

THE WITNESS: The Drumright station is in Oklahoma, probably 60 miles south of the Kansas line. I am not sure of that distance, Mr. Examiner.

BY MR. JOFFEE:

Q. Now, Mr. Roth, the gas flows from the Drumright station in Oklahoma north and east to the Tallant station, which is also in Oklahoma, does it not? A. Yes, sir.

Q. And from thence into the Caney station in Kansas, is that correct? A. No, sir. That gas from that line does not go to the Caney station. It feeds directly to Gravois station in Kansas, due north.

Q. And from thence into the state, farther into the state, of Kansas, and into the State of Missouri, is that correct? A. Yes, sir.

Q. And it is intermingled with other gas which later flows in a northerly direction up to Kansas City, Missouri,

BLEED THROUGH

BLURRED COPY

[1582]

isn't that correct? A. Yes, sir.

Q. And isn't that generally true also of the gas that flows north to the Blackwell station and from thence northerly through Kansas up to Kansas City, Missouri? A. Yes, sir, that is true.

Q. Would you be able to say approximately what proportion of the gas which is delivered at the Edmond Field to Cities Service Gas Company reaches the states of Kansas and Missouri? A. It would be only an estimate, but probably about 75 per cent of it.

Q. What part of the deliveries per day do Cities Service Gas do? A. Sir?

Q. What do they average, what do these deliveries average a day each day from the Edmond Field to Cities Service Gas Company? A. About 115 million a day.

Q. About 115 million cubic feet of gas per day? A. Yes, sir.

Q. And you pay for that gas to Phillips Petroleum Company and of that gas, according to the records of your company, Phillips Petroleum Company has a 19.6 per cent interest, is that correct? A. Yes, sir.

[1583]

Q. Do your company's records show how much gas was sold and delivered by Cities Service Gas Company to the city gate at Kansas City, Missouri? A. Yes, sir.

Q. Was that gas sold to Gas Service Company at the city gate? A. Yes, sir.

Q. Will you give the figures in volumes and dollars

for the years 1948, '49 and '50? A. In 1948 deliveries by Cities Service Gas Company to the Gas Service Company at Kansas City, Missouri, town borders amounted to 23,386,264 MCF. The amount charged for that gas was $3,936,154.56.

In 1949 the deliveries were 26,153,946 MCF, amounting to $4,395,841.63.

In 1950 the deliveries were 41,881,745 MCF, amounting to $6,451,086.02.

Q. Do you have the average price per MCF paid for those three years? A. Yes, sir. The average price at Kansas City, Missouri, town border in 1948 was 16.8 cents, for 1949 it was 16.8 cents, and for 1950 it was 15.4 cents.

Q. Mr. Roth, do you know that that gas was delivered to Gas Service Company at Kansas City, Missouri, for distribution and sale for ultimate consumption in Kansas City, Missouri,

[1584]

do you not? A. Yes, sir.

* * *

Q. Do you happen to know the location of the meters measuring the gas delivered to Cities Servies Gas Company at the Edmond Field? A. Yes, sir. I thought I had a memo on that. But the gas from the West Edmond Plant is measured approximately—I would like to change that. There are two meters. Part of the gas from the West Edmond Plant is measured approximately 5 miles from the plant, east of the plant, and part of it about 8 miles northeast of the plant.

BLEED THROUGH

BLURRED COPY

Q. Is it measured on property of Cities Service Gas Company or on property of Phillips Petroleum? A. Cities Service Gas Company property.

Q. Does this gas come from the Edmond Gasoline Plant in part? A. Sir?

Q. Does this gas come from the Edmond gasoline plant in part? A. Yes, sir.

Q. Most of it comes from the Edmond Gasoline Plant,

[1585]

isn't that true? A. The gas that we buy from the Edmond Field comes from the Edmond Gasoline Plant, and Hunton Plant and the Trindle Plant.

Q. Will you spell those words for the reporter, please. A. E-d-m-o-n-d, H-u-n-t-o-n, T-r-i-n-d-l-e.

Q. Isn't it a fact that the Edmond Gasoline Plant is operated by the Phillips Petroleum Company? A. Yes, I understand it is operated by Phillips Petroleum Company.

Q. The other two plants are not operated by Phillips, is that correct? A. I don't believe they are.

Q. Mr. Roth, is the flow of the gas from the Phillips Petroleum Company's facilities into the pipe line of Cities Service Gas Company, and from thence through the pipe lines of Cities Service Gas Company, into the lines of various local distributing companies continuous and uninterrupted? A. With the exception of gas put into underground storage in the summertime and then moved on to the markets in the wintertime.

Q. And that applies to the gas delivered to the City of Kansas City, Missouri, also? A. Yes, sir.

Q. And these gas storage fields to which you refer

[1586]

are located outside of the State of Oklahoma, are they not? A. Yes, sir, they are in Kansas.

Q. They are in the State of Kansas? A. Yes, sir.

* * *

Examination by Mr. Joffee

Q. Perhaps I had better ask this, Mr. Roth, the gas that goes into storage between the points of delivery in the Edmond Field and Kansas City, Missouri, are at the north and south Welda Storage Fields and Craig Storage Fields, is that correct?

[1587]

A. That is correct.

Q. Usually in the wintertime that gas or some substantial part of it reaches the City of Kansas City, Missouri, isn't that true? A. Yes, sir.

Q. And is delivered into the distributing system in Kansas City, Missouri? A. Yes, sir.

* * *

[1590]

Q. Were there subsequent contracts entered into with respect to this gas field, Mr. Roth? A. Yes. In 1949 Cities Service Gas Company negotiated

[1591]

a contract to take gas from the Hunton plant and the Trindle plant.

BLEED THROUGH

BLURRED COPY

they not? A. No; the Trindle plant is just a compressor thel not? A. No; the Trindle plant is just a compressor plant at this time.

Q. Is that plant operated by Phillips Petroleum Company. A. I don't know who operates it. We are dealing with the unit and the Sohio Oil Company represents the unit under that contract, but I don't know who operates the plant.

Q. So far as the Trindle plant is concerned, does the Cities Service Gas Company pay its money to Phillips for the gas or does it pay its money to Sohio Oil Company? A. The Cities Service Gas Company pays the money to Phillips upon an order from the Sohio Oil Company.

Q. Do you know—I don't know whether I have made myself clear—whether Phillips Petroleum Company actually operates the Trindle compressor station? A. I don't know.

Q. What was the name of the other station? A. The Hunton plant.

Q. Is that operated by Phillips Petroleum Company? A. I don't know. I understand that it is not, but I don't know for certain.

Q. For gas delivered from that plant does the Cities

[1592]

Service Gas Company pay therefor to Phillips Petroleum Company? A. Yes, sir.

Q. And with respect to the gas delivered from the Trindle and Hunton plants Cities Service Company entered into the contract in 1949? A. Yes, sir.

Q. As a seller of the gas? A. Cities Service Gas Company entered into the contract as the buyer.

Q. As the buyer? A. Yes, sir.

Q. And the Phillips Petroleum Company entered into it as the seller of the gas? If you don't know, we will refer to the contracts later. A. Under that contract we made separate contracts with the majority of the unit interests. I suppose 95 to 98 per cent of the interests. The remaining part of the gas is delivered to us by Sohio for the other interests, so long as they don't want to deliver those particular interests, don't want to deliver to some other market.

Q. But in each instance you pay Phillips Petroleum Company for the gas as the seller thereof, is that true or not? A. We pay them the money: I wouldn't say we pay it to them as the seller of the gas. We pay the money to them

[1593]

under an agreement. They disburse the money to the other interests.

Q. Was the last contract entered into that of 1949? A. Yes, sir.

Q. Was this Hunton plant a gasoline plant? A. Sir?

Q. Was this Hunton plant—is that the name of it—a gasoline plant? A. Yes, sir.

Q. And you do not know who operates that plant? A. No.

• • •

BLEED THROUGH

BLURRED COPY

[1602]

Cross-Examination by Mr. Sparks

Q. Do you understand, do you know, what kind of gas is produced from the West Edmond unit, that is, whether it is casing head gas or dry gas? A. I understand that it is casing head gas.

Q. Produced from wells that produce oil? A. Yes, sir.

Q. Now, I believe in answer to a question on direct examination you stated that you paid the Phillips Petroleum Company for the purchase price for the gas which was delivered to Cities Service from these three plants, and it was your understanding that the Phillips Petroleum Company disbursed that money, I believe you said, to other interests. What other interests did you have in mind? A. I mean the interests in the Hunton unit and the money was disbursed in proportion to the ownership of gas of those interests, of the gas that was sold.

Q. Were those interests the lease owners? A. Yes, sir.

Q. I believe you stated that delivery of the gas was

[1603]

made to Cities Service at the discharge of the plants. A. Yes, sir.

Q. And the Cities Service owns the lines from that point on wherever the gas is taken? A. Yes, sir, that is right.

Q. And although some of the gas, all of the gas, from the Edmond plant, is metered at some distance from the point of delivery Cities Service also owns those meters, is that right? A. Yes, sir.

Q. Taking the gas from the West Edmond plant, I believe you said first that approximately 16 million per day is delivered to the Oklahoma Natural line, is that right? A. Yes, sir.

Q. Where is that delivery made? A. That is a direct connection between the Oklahoma Natural lines and the Edmond plant. The Oklahoma Natural constructed a line from their pipe line system approximately three quarters of a mile north of the plant down to the plant, and take delivery of the gas, of course, at the plant.

Q. All right, then does Oklahoma Natural pay you for the gas that they receive? A. Yes, sir.

Q. And do you know the disposition of the gas which Oklahoma Natural takes in their line, do you know where it goes?

[1604]

A. It goes into their general pipe line system.

Q. And do you know where the gas goes in their general pipe line system? A. Only to their markets and Oklahoma, Oklahoma Natural is an intrastate company. All of their lines are in the State of Oklahoma, and they distribute gas in Oklahoma City, for example, and at Tulsa and numerous other smaller towns.

• • •

[1657]

On the sale of the gas out of the West Edmond plant by Phillips to Cities Service or by Phillips and Continental Oil Company, where does that sale take place, does your line run clear up to the plant, to the fence around the

BLEED THROUGH

BLURRED COPY

plant, or what point? A. As I recall, the delivery is made at the plant fence, at or near the plant fence, the boundary of the plant.

Q. Which is several hundred feet from the plant? A. I don't remember what the distance would be.

Q. What is that— A. I believe our agreement is that we were to take the gas at the property line of the plant.

Q. I see. You have a line leading away from that point. That is what size line would you say? A. We have from the West Edmond plant a 10-inch line and we have a 12-inch line.

Q. Yes? A. And Oklahoma Natural has an 8- or 10-inch line.

Q. All of those lines run from, let's say, the property line? A. Yes, sir.

* * *

[1666]

A. H. SCHUMACHER

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Joffee

Q. Just state your name, please. A. A. H. Schumacher.

Q. Where do you live, Mr. Schumacher? A. Kansas City, Missouri.

Q. By whom are you employed? A. The City of Kansas City.

Q. In what capacity? A. As utilities engineer.

* * *

[1667]

Q. Do you know of your own knowledge what natural gas distribution companies now serve Kansas City? A. I do.

Q. What are they? A. The Gas Service Company and The Central West Utility Company.

Q. From what natural gas pipe line companies do these respective utilities purchase their gas? A. The Gas Service Company purchases its gas from the Cities Service Gas Company and The Central West Utility Company is supplied by Panhandle Eastern Pipe Line Company.

* * *

[1668]

Q. Do you have the figures on the amount of gas purchased by Gas Service Company from Cities Service Company for its Kansas City, Missouri, division in the years 1948, 1949, and 1950? A. During the year 1948 The Gas Service Company purchased from the Cities Service Gas Company 23,362,630 and 2/10 Mcf; for 1949 26,101,079 and 5/10 Mcf; and during 1950

[1669]

41,792,183 and 3/10 Mcf.

* * *

Q. How much gas did the city government of Kansas City, Missouri, buy from The Gas Service Company during the year 1950? A. 191,425 Mcf.

Q. And that was represented by how many different accounts of The Gas Service Company? A. We have, I believe, 72 accounts with The Gas Service Company.

BLEED THROUGH

BLURRED COPY

Q. So the city administration is a user and purchaser of gas as well as the people of Kansas City? A. That is right.

Q. These sales of gas by these two respective utilities are continuing in Kansas City, Missouri, at the present time, are they not? I am referring now to the distributing companies. A. Yes, they are continuing.

Q. And both companies operate under franchises granted to them by the city government of Kansas City, Missouri, isn't that correct? A. That is true.

* * *

[1671]

ROBERT BOYD STEWART

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Purdue

Q. Will you state your name? A. Robert Boyd Stewart.

Q. Where do you live, Mr. Stewart? A. I live in Bartlesville.

Q. What is your position with the Phillips Petroleum Company? A. I am Assistant Manager of the Natural Gas Department.

* * *

[1674]

Q. I hand you what is designated as a notegram, dated July 7, 1948, and which recites "Memo to Allen B. Hyatt from R. B. Stewart." Did you prepare that notegram? A. Yes, sir.

Q. And also the attached sheet entitled "Additional Acreage Shown by New Michigan-Wisconsin Exhibit A"? A. Yes, sir.

* * *

[1680]

MR. PURDUE: Mr. Examiner, I'd like at the present time—I don't care to argue that point at this minute—to have the memorandum dated July 7, 1948, which the witness has stated that he prepared, marked for identification as the next exhibit in order.

PRESIDING EXAMINER: That will be marked for identification as Exhibit No. 53.

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED FOR IDENTIFICATION AS EXHIBIT NO. 53.)

PRESIDING EXAMINER: Would you describe that please for the record. I believe that it is a notegram from Mr. Stewart to Mr. Hiatt dated July 7, 1948?

MR. PURDUE: July 7, 1948, consisting of one sheet and an attached sheet also in the handwriting of the witness entitled additional acreage shown by new Michigan-Wisconsin Exhibit A.

* * *

[1744]

MASON G. WALTERS

resumed the stand, and having been previously duly sworn, was examined and testified further as follows:

BLEED THROUGH

BLURRED COPY

Redirect Examination (Resumed) by Mr. McAllister

Q. Mr. Walters, you are the same Mason Walters who has heretofore testified in this case and been sworn? A. I am.

MR. McALLISTER: Mr. Examiner, I ask to have marked as Exhibit 54 a document identified as outside sales of Natural Gas, year 1950.

PRESIDING EXAMINER: It will be so marked.

* * *

Q. Mr. Walters, I refer you to Exhibit 54, which has been marked for identification, and ask you whether or not that exhibit was prepared by you. A. It was.

Q. Referring to the first sheet in that exhibit, let's call it first page, because there is following that another document marked Sheet I, which is a photostat of certain pencil or pen figures, and at the top of that sheet

[1745]

marked Sheet 1 of one, it is indicated that that is a summary for the year 1950 of outside sales of natural gas by Phillips Petroleum Company, is that right? A. That is right.

Q. When you refer there to outside sales do you mean by that sales by Phillips Petroleum Company to individuals and companies who are not a part of the Phillips organization as contrasted with inside sales represented by volumes of gas delivered by Phillips Petroleum Company to other departments of the Phillips Petroleum Company for chemical, synthetic rubber or what not, where the operations are carried on by Phillips Petroleum Company within their

own organization, is that right, is that an accurate description? A. That is correct.

* * *

[1786]

MR. McALLISTER: Mr. Examiner, I ask to be identified at this time an exhibit identified as outside sales of natural gas for the year 1949, and ask that it be marked for identification as Exhibit No. 55.

PRESIDING EXAMINER: It will be so marked.

* * *

Q. Mr. Walters, do you have a copy of Exhibit 55 for identification before you? A. Yes, sir.

Q. Was that exhibit prepared by you? A. Yes, sir.

* * *

[1787]

Q. Sheet 1 is a summary sheet, is it not? A. Yes, sir.

Q. Is that summary sheet in Exhibit No. 55 the same, I mean so far as heading, descriptive content and so forth, as the summary sheet in Exhibit 54? I mean other than the different in pressure base. A. There is a small difference in pressure base here, this being at 14.735 p.s.i.a. The headings are the same as in Exhibit No. 54. There is a slight difference in some of the items on the left-hand side. By that I mean the sales to the Wasatch Oil Refining Company appear on this exhibit and did not appear on the sales for 1950. Outside of that they are similar.

* * *

[1789]

Q. And without going through the individual details on this exhibit on the summary sheet, is it true that the

BLEED THROUGH

BLURRED COPY

items that appear on the total sales and total sales dollars, the first being Mcf, are figures reflected on the records of Phillips Petroleum Company for the year 1949? A. They are.

* * *

[1796]

A. M. RIPPEL

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Purdue

Q. Will you state your name? A. A. M. Rippel.

Q. Where do you live, Mr. Rippel? A. Bartlesville, Oklahoma.

Q. What is your profession? A. I am employed by Phillips Petroleum Company.

Q. What is your position with that company? A. I am now manager of the Gas Department.

Q. How long have you held that position? A. Since March 1, 1951.

Q. How long have you been in the employ of the Phillips Petroleum Company? A. Since December 1, 1925.

Q. Will you state the other positions which you have held and the respective lengths of time that you occupied those positions? A. With Phillips Petroleum Company?

Q. Yes. A. From December 1, 1925, until December 1, 1937, I

[1797]

was evaluation engineer attached to the Comptroller's Department. December 1, 1937, I was transferred to the natural gasoline and gas department as assistant manager of the gas division. I held that position for a year or year and a half and was then more or less considered the manager of the division. However, I believe it was not on any chart. And I have held that position, then, up until March of this year.

* * *

[1867]

HOWARD MARKLEY

resumed the stand, and having been previously duly sworn, was examined and testified further as follows:

* * *

[1869]

MR. McALLISTER: Mr. Examiner, I would like to have marked for identification as Exhibit No. 58 a statement which has been supplied by Mr. Sparks showing volume of gas processed and the volume flared from gasoline plants in the Panhandle-Hugoton Field, such plants being the Dumas plant, Sherman plant, Hansford plant, Gray plant and Sneed plant for the year 1950 and for the month of March 1951.

PRESIDING EXAMINER: That will be marked for identification as Exhibit No. 58.

* * *

BLEED THROUGH

BLURRED COPY

MR. McALLISTER: I offer at the same time, Mr. Examiner, as Exhibit 59, for identification a tabulation showing the same information for the years 1950 and for the month of March 1951 in relation to the Crane plant, Goldsmith plant, Fullerton plant and Eunice plant in what is known as the western district gasoline plants of Phillips Petroleum Company, they being the plants in the Permian Basin.

MR. McALLISTER: Isn't that true, Mr. Markley?

THE WITNESS: Yes, sir, that is true.

PRESIDING EXAMINER: The document described by counsel will be marked for identification as Exhibit No. 59.

* * *

[1870]

MR. McALLISTER: So the exhibit may be marked for the furnishing of the copies, I offer them in evidence at this time, Mr. Examiner.

PRESIDING EXAMINER: Is there any objection to the exhibits 58 and 59?

(No response.)

PRESIDING EXAMINER: Exhibits 58 and 59 are received in evidence.

* * *

[1881]

A. 1313. And the lines are 19 to 23, 19 through 24, since giving this testimony I have checked the sales records and find that I was mistaken there had been occasions due to cold weather when we were entirely out of gas for sale

to El Paso from these four plants. The answer to the question beginning with line 19 should be, "Well, they have down time, too, of course, except for the times when they are down or we are down, it would be continuous."

Q. Then that would be eliminating the volumes of the gas produced in the field does not leave sufficient residue—You eliminate those words. I mean in other words, the volume of gas, there is also a continuous and uninterrupted flow to El Paso?

[1882]

A. With the exceptions that I put in the answers, yes, sir.

Q. Except when they are down for some reason or you are down for some reason, a line break or something like that? A. That is correct.

* * *

[1898]

Q. The last reference you made was to page 1419, line 10, that was that answer you corrected. A. That is the last one, yes, sir. The next one will be on page 1421, line 11. We got into that somewhere later in the record and it was a misunderstanding. The answer on line 11, page 1421, should be yes, sir.

* * *

[1902]

MR. McALLISTER: They are right on this question. "To" is what it should be. It should be a correction actually in the record.

* * *

BLEED THROUGH

BLURRED COPY

[1973]

PRESIDING EXAMINER: Is there any objection to these exhibits? [Exhibits 54 and 55.]

MR. SPARKS: We object to the dollar figures as being irrelevant.

* * *

[1975]

PRESIDING EXAMINER: The objections to Exhibits 54 and 55 are overruled.

Those exhibits are received in evidence.

* * *

[1977]

A. M. RIPPEL

resumed the stand, and having been previously duly sworn, was examined and testified further as follows:

Direct Examination (Resumed) by Mr. McAllister

Q. Mr. Rippel, as I recall your testimony, you were first employed by the Phillips Petroleum Company as an evaluation engineer? A. That is correct.

Q. You are a graduate engineer, are you? A. Yes, sir.

Q. And you were employed as an evaluation engineer from December 1, 1925, until December 1, 1937, as I recall your testimony? A. That is correct.

Q. And from December 1, 1937, until the present time you have been with the gas department of Phillips Petroleum Company? A. The gas division and then the department.

Q. The gas division up until March 1, 1951, and then the gas division from then on?

[1978]

A. Gas department from then on.

Q. Gas department from then on. And you are manager of the gas department now and has there been a substantial change in your duties or have they remained substantially the same as they were prior to March 1, 1951? A. My responsibilities have been increased to the extent of the gathering of gas where the market determines the amount produced.

Q. That would be, for example, the sales through Sherman and Hansford plants? A. That always has been my responsibility, the sales through Hansford plant.

Q. Can you give us an example of the increased duties to which you refer related to operations? A. Where the market determines the amount of production, the gas department has the responsibility of the gathering, the actual control over the men in the field. Prior to March 1, 1951, that responsibility was in the gasoline division of the natural gasoline and gas department, they having been our operators, that is the gas divisions operators.

Q. Yes. Now give me an example of where that existed prior to March 1 and where they are now under your jurisdiction and supervision? A. In dry gas fields and in distillate fields, we have the complete operation from the well to the sale, with the

[1979]

exception of the extraction of the gasoline.

BLEED THROUGH

BLURRED COPY

Q. Yes. Now, where— A. (Interrupting.) Prior to March 1 we did not.

Q. What is an example of an operation where that-- A. (Interrupting.) The Borger area.

Q. What? A. The Borger area.

Q. Is that the only one you recall? A. No. The Michigan-Wisconsin area, Panhandle Eastern area.

Q. The what? A. Panhandle Eastern, Hansford block, Chocolate Bayou area. Well, the Chocolate Bayou area doesn't change. We have always produced that.

Q. How about the Permian Basin? A. The Permian Basin, we have the gathering and sale. As far as responsibility of the actual gathering, has done by the natural gasoline department, because in that instance the sale does not determine the amount of production. The control of the gas produced is in the hands of the others, the oil operators.

Q. Am I to understand that no one of the gasoline plants that we have been talking about in this proceeding, the Hansford plant, Sherman plant, the Gray plant, the Dumas plant, or the Sneed plant, none of those come under your jurisdiction?

[1980]

A. Insofar as extraction of natural gasoline and other liquifiable hydrocarbons, it does not.

* * *

[1981]

Q. In all of the cases where you have jurisdiction over the gathering of gas, as you call it, that gas moves

from the well head through connecting pipe lines into the plant, gasoline plant? A. If there is a gasoline plant where we gather gas, it does enter a plant which is partly a part of the gathering system.

Q. Why do you say it is a part of the gathering system? A. Because it, in fact, is. The gas is not gathered until it's —at least the residue part of it is not gathered until it is— delivered for sale.

Q. Why do you say that? You are defining your statement by a restatement of the same proposition? A. Well, I want it clear.

Q. I mean you just repeated it. It is because it is. What are the facts? The gas when it enters the gasoline plant has been assembled into a single continuous flowing stream, isn't that right?

[1982]

A. Don't ask me about too many facts about what happens at a gasoline plant.

Q. I am not. This question I have has nothing to do with a gasoline plant. I said it comes into the plant and is collected into one continuous flowing stream that is the commingling of all of the gas from whatever source it comes at that point, isn't that a fact? A. The raw gas, yes, is commingled at one point.

Q. And that is the entire input of gas into the gasoline plant? A. Raw gas, yes.

Q. And nothing remains to assemble the volume which is the volume to be processed through the plant? A. The volume of raw gas to be processed in the plant, that is correct.

• • •

BLEED THROUGH

BLURRED COPY

[1985]

Q. You know the principal elements in a gasoline plant are, first, the scrubbers, I mean passing up other incidental equipment as it goes through the scrubbers, you know that the flow is continuous, do you not? A. Yes, sir, it is in a series of baffle plates.

Q. In that operation there is no equipment between the point gas comes in to the plant and up through the scrubbers, where the flow is not continuous. True, there may be compressors in there, but the gas goes into a common header and through the compressors and on through the scrubbers, is that right? A. I thought the testimony here was that the gas comes through the scrubbers first, to take out impurities, and then goes to absorbers.

Q. Well, what you say may be true. I think you are probably right. A. I don't know too much about the detail.

Q. Well, through the scrubbers, through any compressors that may be there and through the absorbers, there is no piece of equipment along there that interrupts the continuous flow of the gas?

[1986]

A. Not to my knowledge.

Q. And then from the absorbers, disregarding the overhead vapors and what not that may be recovered through the distillation of the circulating oil in the absorbers, the residue gas out of the absorbers continues in its uninterrupted flow on through the lines that carry the residue gas to, let's call it, market, whether it be a carbon black plant or to a pipe line such as El Paso, Panhandle or Michigan-

Wisconsin? The gist of that question was—I made it a little bit long— A. (Interrupting.) Outside of perhaps treating the gas, I believe the gas is in constant movement. However, we must consider the overhead vapors coming in, because that is a part of the residue, which is sold.

Q. Well, those overhead vapors move into the residue stream, although they are first absorbed, I mean they are a part of the liquid hydrocarbons absorbed in the circulating oil in the absorbers, and then after renovating that oil they are recovered overhead as vapors and led back into the residue gas stream? A. Led back to the stream which makes it all the residue gas.

* * *

[1990]

Q. I just wanted to state that you did not know of any such interruption to the flow of gas in the manner in which I described it in my question. The gathering lines which come under your jurisdiction—let me put that a little more clearly—the gathering lines which are in operation between the wells and the gasoline plant are assembled or laid in a form which provides for large diameter pipe lines, relatively speaking, which connect with the gasoline plant and as they fan out to the wells they reduce in size and

[1991]

increase in number as they connect to the various wells in the field, isn't that right? A. Yes; a gathering system is designed by the engineers to provide a minimum drop of pressure, considering economics, through their experience

BLEED THROUGH

BLURRED COPY

they estimate which is the most economical type of a system to build to gather the gas for processing and sale.

Q. That is indicated by the manner in which the lines are designated on the maps of your engineers by the large lines being given a letter designation, such as A, B, C, D, and then as the lines lead away from those, they are given A-1, A-2, or whatever designation they deem appropriate, in other words, the A, B, C, lines lead into the plant and the other lines are lines connected with the letter designations to which a further numeral or letter is attached, isn't that right? A. I learned about three weeks ago that that is correct. I didn't know it before that. That is on some maps and on our engineering maps that is so.

Q. Your engineers are the ones who design the lines? A. That is correct.

Q. And the system which they laid out is the system which they designed? A. Yes.

Q. And you are familiar with these exhibits, 12, 13, 14

[1992]

and 15, are you not? A. May I see them, please?

Q. That is 12. This is 14-A. A. I have seen the exhibits.

Q. Those lines with the letter designation on them, whether 16 or 24-inch lines on Exhibit 12 leading into the Hansford plant, might be given a name or descriptive term and they might be called trunk lines, might they not? A. In the first place they lead into the Sherman plant.

Q. Oh, Sherman plant, yes, sir. A. And you may call them trunk lines. I wouldn't. We don't speak of them in that manner.

Q. I know you don't speak of them that way, but looking at that map and considering their size and the branch lines emanating from them, they provide the trunk line connections between the smaller lines in the field and the plant, do they not? A. They provide the connection through large diameter pipe.

Q. Why would you object to calling them trunk lines? A. If you wish to define them as trunk lines, I'll use trunk. I just don't refer to them as trunk.

Q. Well, you can call them backbone lines, then? A. I call them large gathering lines.

Q. I know you would. You like the term gathering, but

[1993]

I was trying to select a term that would be descriptive without trying to use the term—I could call them transmission lines, but I don't for the purpose of this questioning. I am trying to gather from you, through your knowledge of the facts, what the function is of those lines in relation to all of the lines in a particular area. A. The function is gathering gas.

* * *

[2014]

Q. Why do you say that gathering can't be completed until the gasoline has gone through the gasoline plant? A. The only purpose of gathering natural gas is to dispose of it, whether through use, sale and the gas, the natural gas, as produced is gathered, prepared for market and disposed of, in its preparation, the liquifiable hydrocarbons are taken out, removed and sold. That is a part of the natural gas.

BLEED THROUGH

BLURRED COPY

After the extraction of the liquifiable hydrocarbons, the term residue is commonly used, and that is what is sold or used in the majority of our sales and uses.

* * *

[2020]

Q. I will, I will; you go ahead and take all of the time you want to explain your answer. A. Gathering of natural gas, to me, is the collection of the gas from wells or points in or near the leases where

[2021]

the gas is produced to a point or points in or near the field of production through his system of pipe lines and the preparation of the gas for market. Now, as I started to say, you are asking me for maybe a legal interpretation. You stipulate the point of delivery, and I assume the title to the gas is passed to Michigan-Wisconsin. The part that to me is still a conditioning, that didn't happen, and that to me is part of gathering, the conditioning of natural gas to make residue gas and gasoline. Now, as to whether legally that would be part of gathering, it is in or near the field. A hundred miles wouldn't be in or near the field.

Q. Five miles would? A. Well, it would be. There could be wells on the other side of it. I know there are wells on the other side of the Hugoton field beyond a point of five miles from the Sherman plant. That is the basis—

Q. (Interrupting.) From which the gas comes into the Sherman plant? A. No. Well, yes, the gas comes into Sherman plant, yes. Gas from Texas County, Oklahoma.

Q. You would say, then, that even though the gasoline plant was located on the downstream side from Michigan-Wisconsin compressor station where you owned the plant and you processed the gas and the contract with Michigan-Wisconsin gave you that opportunity or that right, gathering has not

[2022]

been completed until you process the gas? A. Well, it is a function of gathering.

Q. I mean you are telling me that now, but I am asking you a practical problem. Do you say that gathering— A. (Interrupting.) You just don't do it that way practically, Mr. McAllister.

Q. No, but you thought about it here under this circumstance and I'm trying to find out what the limits of your definition are. A. I tried to answer.

Q. Tell me this, is the gasoline plant if on the downstream side from the first compressor station of Michigan-Wisconsin and it is your gasoline plant and you operate the gasoline plant and you take out of the stream of gas the liquid hydrocarbons in the same fashion in which you do now, would you say that gathering has not been completed until the gas leaves your gasoline plant under those circumstances? A. I thought I answered that.

Q. Well, it either has been completed prior to that time or it has not? A. The gas certainly has been conditioned for market and that is part of my idea of gathering. As to location beyond where the title to the gas has gone to Michigan-Wisconsin, the actual function is the same.

* * *

BLEED THROUGH

BLURRED COPY

[2024]

Q. Now I ask you another question, and I have given it to you, where you deliver the gas to Michigan-Wisconsin, they

[2025]

compress it, and then it passes through your gasoline plant, and I have asked you if, in your concept, under those circumstances gathering has not been completed until the gas passes out of your gasoline plant, and you can answer that yes or no, if you will. A. Under that circumstance, that is a function of gathering.

Q. And gathering has not been completed, just answer that question. You argue. Has it been under those circumstances, you say that gathering has not been completed until the gas passes through that gasoline plant? A. I think that is right.

Q. All right. Now, then, the next question, all of the facilities of Michigan-Wisconsin upstream from the gasoline plant are gathering facilities, is that right, the compressor station and the pipe line that they have is a part of the gathering, is that right? A. I wouldn't so consider it.

Q. You wouldn't so consider it. In other words, you have gathering facilities and transportation facilities and gathering facilities again, is that right? A. The gasoline plant, the residue gas as conditioned and delivered to them is a function of gathering and that is what is done.

Q. Then on a gasoline plant it wouldn't make any

[2026]

difference if it was a hundred miles upstream, then, it

wouldn't be completely gathered until it went through the gasoline plant, no matter where it is located, is that right? A. I believe I would call it a different function if it weren't in or near the field, Mr. McAllister.

Q. It has to be in or near the field? A. That is correct.

* * *

[2030]

A. If I understand this exhibit correctly, the first time that the raw gas is commingled is in the 26-inch header which shows under that absorber with the numeral nine after it. That is insofar as the raw gas volume is concerned. My idea of gathering is the preparation of the gas which we are going to market. That is part of gathering.

Q. In other words, in the first place the entire volume of gas into a plant must be assembled in one volume? A. It could be a separate volume for different sale. I don't just recall what plants in our system that might apply to. There could be separate systems for different sales on different specifications.

Q. Well, there might even be two volumes going to the one sale if the volume is joined afterwards for some purpose of operation, isn't that right?

[2031]

A. If the residue that was sold joined after the processing through the absorbers, it would still be a function of gathering, yes, sir.

Q. Which would be the function of gathering? A. The entire operation, gathering the product of which we dispose, just as we gather the gasoline in the tanks.

* * *

BLEED THROUGH

BLURRED COPY

[2032]

THE WITNESS: If the natural gas as produced is not dehydrated, desulphurized, compressed, liquified hydrocarbons taken out or removed or any other operation incidental to the conditioning of the sale of this natural gas, if none is done before delivery to a market, that is my idea in a general way of gathering.

* * *

[2037]

Q. All right, I'll limit that question to gathering as you have defined it. A. The functions that we do in the collection of gas through a system of pipe lines and preparing it for market in accordance with our contracts is gathering.

Q. And if you have to dehydrate and remove sulphur under your contract, then that is a part of gathering,

[2038]

according to your notion? A. That is certainly the way I believe.

Q. And if under the contract you are not required to do that, then it is not a part of the gathering? A. By my own understanding of gathering, the way I look at it, that is correct.

* * *

[2093]

Q. Yes, but in the normal course of business, day to day operations, hour by hour, minute by minute, there is a volume of gas flowing from Phillips to Michigan-Wisconsin. I don't say it is constant, but it varies as to certain

amounts, but there is that constant flow of gas? A. That is correct.

Q. And in order to provide that constant flow of gas to Michigan-Wisconsin there is a constant production in the wells connected with what you call your gathering system, isn't that right? A. The gas must be produced from the wells before it can be gathered and delivered to Michigan-Wisconsin, that is correct.

Q. The question is this, in order that there be that constant flow out to Michigan-Wisconsin, there must be a constant production and movement of gas through what you call your gathering system. The constant flow to Michigan-Wisconsin

[2094]

would not be possible without the constant flow from the wells in your Sherman system through what you term your gathering lines, is that right? A. Constant flow through the entire facilities, yes, sir.

Q. And the same is true at the Hansford plant, through the gathering system of the Hansford system, as you define it, through the Hansford plant and through your connection with Panhandle Eastern, is that right? A. That is the purpose of gathering the gas.

Q. I know it is the purpose, but I'm asking you as a fact— A. (Interrupting.) To fill the market you have to produce it and you have to gather it.

Q. And it is a constant movement right all the way through? A. With possibly a drop in pressure, why, there is constant movement.

* * *

BLEED THROUGH

BLURRED COPY

[2097]

Q. You haven't so stated. All right, I just misunderstood you. And just as the movement of gas through the Hansford and Sherman plants from the wellhead to the point of delivery with Michigan-Wisconsin and Panhandle, at those points, is continuous, a continuous and uninterrupted flow is what I mean, it is constant, so also are the deliveries by Phillips through the Gray plant, the Sneed plant, the Dumas plant, the Goldsmith plant, the Eunice plant, the Crane plant, and the Fullerton plant, isn't that right? A. If I understood your question correctly, you just ask it is constant through the Hansford and Sherman plants. It is true at all these other plants is my memory of the way the question was stated.

Q. I didn't mean constant volume. I mean continuous.

[2098]

It is better, a continuous flow. A. There is a continuous movement between the system of pipe lines in the plants until the gas is delivered.

Q. All the way from the wellmouth? A. From those wells that are connected.

Q. Those wells that are connected? A. Yes.

* * *

[2103]

Q. Well, that is one of those turns down the road that we can't see beyond. Are you familiar, Mr. Rippel, with the cost of constructing 24 and 30-inch pipe line? I have in mind the 24-inch lines recently constructed from the

future site of the Tex Booster Station into the Sherman plant? A. No, sir, I am not. I know in a general way. I know an estimate was made and the work was done. I probably saw it, but the figure didn't stick with me.

Q. I mean on a million dollar basis, a 24-inch line be on the basis of $50,000 a mile, do you know?

[2104]

A. Something on that order, I would imagine. It used to be a thousand dollars an inch. Now, it is getting up to two thousand an inch. Some people use 1700, 1800, depending on the length of the pipe and how the labor market is. Those matters —

Q. (Interrupting.) Well, what I am interested in, and I want you to know the full import of your answer is 160 miles of pipe line that Michigan-Wisconsin has built up to the vicinity of the Missouri River at the time the August 9 contract was entered into, August 9, 1948, contract was entered into, that was about 160 miles, and I thought that if you figured that at about fifty thousand dollars a mile, which would mean about eight million dollars worth of pipe in the ground at that time, we could let it go at that. I am prepared to prove the figures, but if you will agree that that is a fair and representative figure from your knowledge of cost, I think we can let it ride at that. A. I would imagine that that is a fair figure.

Q. It would certainly be on the order of eight million dollars spent in that pipe line construction? A. If it had been laid and paid for there would have been eight million dollars spent, yes, sir.

* * *

BLEED THROUGH

BLURRED COPY

[2107]

GEORGE P. BUNN

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. McAllister

Q. Mr. Bunn, I believe you are employed by the Phillips Petroleum Company? A. Yes, sir.

Q. What is your full name? A. George P. Bunn.

Q. And you have been employed by the Phillips Petroleum Company for how long? A. Since 1921.

Q. During that period of time, will you state briefly for the record what positions you have held with the company? A. Well, since the beginning until about 1930 I was the assistant to manager of the natural gasoline and gas department and from 1930 until March of this year I was manager of the natural gasoline and gas department and since that date manager of the natural gasoline department.

[2108]

Q. Manager of the gasoline department? A. Natural gasoline department.

Q. Would you state for the record briefly what your duties include, just what that natural gasoline department is? A. Do you mean now or through the years?

Q. Now. A. Now it involves the operations, the company operations, in whole or in partnership in natural gasoline manufacturing plants and various types of special products plants such as synthetic fuels, chemicals; it in-

volves the purchase of considerable gas as a supply for those plants; it involves the administration of all of the activities of the department, that is, the management of the personnel, the organization of the department, the design of the plants, the direction of construction, installing, sale of plants, the disposition of some of the products; it involves membership in the company's operating committee and various other committees of the company.

* * *

[2121]

Q. And as you operate these plants, in the normal course of business, which might be referred to as your day to day operations, there is a continuous flow of gas into the plant and a continuous flow of gas out, isn't that true? A. Except for interruptions, yes.

Q. Well, interruptions which would be in the face of a breakdown or what-not? In any 24-hour period there would hardly be a break in the continuous flow of gas of normal operations? A. Continuous flow through the plant?

Q. Yes, sir. A. That is right. The outlet of the gas might vary in that time, however.

Q. The volume? A. The direction.

Q. How do you mean the direction? A. Well, it might go to one place part of that time and

[2122]

another place in greater volume at another time rather than all to the same place.

Q. Well, that would be true in, let's say, at the Goldsmith plant? A. It might be true in any of them.

BLEED THROUGH

BLURRED COPY

Q. Could it be true in the Sherman plant? A. Yes, sir.

Q. I don't fully understand your answer. A. Well, the gas might not flow continuously at sometimes to, let's say, Michigan-Wisconsin from the Sherman plant, it might go to the air for a short period. There might be instead of a shutdown of the plant, there might be difficulty on the Michigan-Wisconsin system, and the plant might continue to operate rather than for all the wells to be shut down immediately.

Q. Well, I have an exhibit here which shows for the Sherman plant in the year 1950, which is Exhibit 58, and they show no volume flared during any of the 12 months of 1950 and for the month of March 1951 no gas flared, so that condition would not have occurred at the Sherman plant during that period? A. That is right.

Q. So that it isn't a very frequent occurrence, as you mentioned, that this escape or venting of gas to the air or flaring it takes place?

[2123]

A. No, that is right. It isn't a thing we even want to happen.

Q. Nobody wants a thing like that to happen, because it is just a plain ordinary waste of gas. A. But you asked me in the day to day operations and I had to assume in a longer period of time it can happen.

Q. Yes, it can happen, but if you took a month's period or a week's period a period something like that it would be unlikely, would it not, that there were any times when there was not a continuous flow to Michigan-Wisconsin through the Sherman plant? A. There would be, we

would hope that there would be, no occasion where we would vent any and that there would be a continuous flow of a part of the gas coming to the plant.

* * *

[2132]

Q. And so far as the casing-head gas in these four plants that I have just named, Crane, Goldsmith, Fullerton and Eunice Plant, the gas is produced in association with oil and the oil is the controlling element that is regulated at point of production and the gas comes with it and into the plant and if there is no market for it, you have no election but to flare it, as I understand it? A. That is right, if it comes to the plant we have no election if the outlets aren't great enough to absorb it.

Q. At the Crane Plant, this shows that for the year 1950 out of 11 billion 604 million 420 thousand cubic feet was processed and of that volume 3 billion 981 million 754 thousand cubic feet was flared, which means that considerable

[2133]

more than a third of the total gas in that plant in the year 1950 was flared. The others don't run as high as that. There is 392 million 72 thousand at the Goldsmith Plant, 889 million 611 thousand at the Fullerton Plant and 1 billion 77 million 804 thousand at the Eunice Plant, but there are only two months at the Fullerton Plant where there was no gas flared, that is, January and February of 1950 and at the Eunice Plant there was January, February and March there was no gas flared, so that as those plants are now

BLEED THROUGH

BLURRED COPY

operating it is almost a constant occurrence that gas is flared at those plants, is that right, this Exhibit shows that? A. Through the year it was.

Q. Now we come down to March 1951 and that shows that there was some gas flared in each and every one of those plants? A. That is right.

Q. So that apparently it is a continuing situation, is that right? A. Well, it has shown so for that year and for the month of March this year. We may improve it in time.

Q. If we go back the other way in '48 and '49, do you think there is a better picture than this? A. No.

Q. It would be worse? A. Well, yes, it would be better back sometime in the

[2134]

past because there wasn't much gas coming into these plants, but it will be improved some in the future.

Q. Would you say in the usual, normal, regular day's operation of these four plants in the Permian Basin that we have just been talking about, the Crane plant, the Goldsmith plant, the Fullerton plant and the Eunice plant, as well as the Sherman, Hansford, Gray, Sneed and Dumas plants in the Panhandle and Hugoton area, that with respect to all of those plants that the flow of gas through such plants is continuous? A. The flow of gas through the plants is continuous?

Q. Yes.

* * *

[2136]

Q. Well, where it is a volume of gas moving out through the line connecting with the interstate pipeline, there must

be, that must be, gas that has moved in a continuous stream from the point of production all the way through the plant except where you might valve off a little line from time to time, but when you open that, well, then, it enters the stream and goes on out, isn't that right? A. There is bound to be a continuous flow of the gas from some sources through the plant connection into a sale, if that were the major outlet of the plant, regardless of the variation of the sources of gas, else by the very nature of the

[2137]

gas, there is no place for it to go, it either goes or it is not going, it is not produced or it is produced. You'd have to put it in underground storage or build large holes for it. It just can't help but be continuously moving in the major mass.

Q. And there are no underground storage places being utilized in the Texas-Oklahoma area? A. There is continuous movement through the plant to every outlet we have, whether it be vent, an interstate pipe line, an intrastat pipe line, a fuel connection, whether it be carbon black or whatever it is, it is bound to be continuous by the very nature of the material if the plant is running at all.

* * *

[2147]

Q. When you say gas is conditioned, are you there referring to desulphurization? A. I am referring to quite a few things.

Q. Anything that can happen in a gasoline plant? A. No, no.

BLEED THROUGH

BLURRED COPY

Q. I thought you did. Now, I don't know, I didn't mean that in any—I just thought that is what you were referring to. A. The things we have to do to the gas to meet the specifications under which it is to be delivered.

Q. I see. If you have to take out the sulphur, that is one of the things. If you don't have to take it out, then it isn't one of them? A. That is right.

Q. If you have to take out the water content that is one thing? A. That is right.

Q. If you don't have to, well, it isn't. I mean it all depends on your contract what conditioning means? A. That is right. Your whole purpose for gathering gas is for disposal and you have to meet the conditions for disposal or there is no use in gathering it.

Q. One thing is certain, that you can't increase the Btu content of gas flowing out of a plant to a point higher than it was when it came in.

[2148]

A. Yes, you can.

Q. How? A. Oh, there are a number of ways. In the first place, the gas that flows out of it may be a small part of the gas coming in, and you can increase the Btu value to considerably higher than the raw gas coming through the plant.

Q. What would you be doing with the other portion of the gas? If there is only a small part going out, where would the rest be going? A. I mean a small part flowing out to one outlet.

Q. Yes, you could produce a stream out of a plant which would have a Btu content higher than the Btu con-

tent of the total stream coming in, but that would not be possible with respect to a large volume such as flows out of any of these plants to an interstate pipe line? A. Yes, it would.

Q. Where? A. You could, for instance, increase the Btu content out of the Sherman plant going to Michigan-Wisconsin to a value higher than the gas coming into that plant by taking the liquid product from Hansford plant and enriching the gas to Michigan-Wisconsin.

* * *

[2157]

Cross-Examination by Mr. Sparks

Q. Mr. Bunn, I'd like you to look at Exhibit 59. I'd like to ask you if you know the month when the sales to El Paso were commenced from the Crane plant. A. I think it was July 1950.

[2158]

Q. I call your attention to Exhibit 59 and at the Crane plant for the months preceding July 1950, the volumes of gas flared were very substantially larger, were they not, than for those subsequent to July? A. The volumes flared were larger and the intake volumes were smaller.

Q. That is correct. For example, during the month of June the volumes processed at the Crane plant were 959,275 Mcf and the volume flared during the same month in the Crane plant was 633,353 Mcf, according to this exhibit? A. Yes.

Q. And during the next month of July the volume

BLEED THROUGH

BLURRED COPY

processed increased somewhat to 1,043,744 Mcf and the volumes flared was reduced to 398,756 Mcf? A. That is right.

Q. And during the month of August the volumes processed increased to 1,055,619 Mcf, and the volume flared was reduced to 32,244 Mcf? A. That is right.

Q. And then continuing on, as shown on this exhibit. In your direct testimony you stated that the flaring at the four plants in the Permian Basin, as is shown on Exhibit 59, will be improved some in the future. By being improved, I assume you mean being reduced in volumetric proportions to the

[2159]

volumes processed at the plants? A. That is right.

Q. How do you expect the proportion of the gas which has been flared in the past and during the year 1950, as shown on Exhibit 59, to be decreased in the future? A. Well, there are a number of influences that may be anticipated. It may be noted from Exhibit 59 that the flare at Eunice plant in proportion to the intake volume, which is the largest of any of the four plants for the year shown, is considerably lesser in percentage than for the other plants. That would indicate there that we have made marked improvement in that we did not always have that plant in that condition. We flared much greater volumes. We were able to effect useful outlets for the gas over a period of time, so that we reduced the flare down to almost the irreducible minimum, considering the variations of production on the leases from which the gas comes, as well

as the variations of outlet. In the case of the Goldsmith plant, we expect to increase the sales there to some of the present sales outlets. We expect producers to use more of the residue gas on their properties in connection with the production of oil and development of the properties, and we expect in time, if flaring continues at any inordinate degree, that the State Railroad Commission will limit the production of oil to force the permissible and allowable uses of the residue gas

[2160]

or the restriction of oil production, if that isn't done.

Q. Do you know of any efforts that the company has engaged in to attempt to remove the situations or alleviate the situations whereby there are these rather wide fluctuations in volumes of gas coming to the plant which necessitate some flaring? A. Yes. We have done considerable with the producers to encourage more even production of gas or the orderly staggering of production of oil and gas so that we can smooth out the flow of gas to our plants so that we may have a more uniform intake from hour to hour and day to day.

Q. Would you say that the principal cause of the flaring, aside from any breakdown in either our facilities or the facilities of the purchasers, was the uneven flow of gas to the plants as to volume resulting from the uneven production of oil by the producers on the leases? A. That is true here of all of these plants in general, except Crane plant, where in the case of Crane plant in the year shown on this Exhibit 59 there just wasn't any substantial outlets

BLEED THROUGH

BLURRED COPY

for residue gas at all until the El Paso purchase began in July.

* * *

[2166]

HENRY J. O'LEARY

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Honeck

Q. State your full name, please. A. Henry J. O'Leary.

Q. And your residence? A. Madison, Wisconsin.

Q. What is your occupation? A. I am chief of the Rate and Research Department of the Public Service Commission of Wisconsin.

* * *

[2172]

PRESIDING EXAMINER: That will be marked for identification as Exhibit No. 61.

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED EXHIBIT NO. 61 FOR IDENTIFICATION.)

* * *

[2176]

Q. Can you tell us what those sources were?

* * *

[2178]

A. The actual figures for 1950 were taken from the report of the Michigan-Wisconsin Pipe Line Company to the

Federal Power Commission. The estimate for the year ending March 31, 1952, were taken from a study presented to the Public Service Commission of Wisconsin by Michigan-Wisconsin Pipe Line Company in connection with its filing of a proposed increase in rates before the Federal Power Commission.

* * *

[2181]

Q. You sponsor this exhibit as being true and correct, do you not? A. Yes, sir.

MR. HONECK: At this time the State of Wisconsin and the Public Service Commission of Wisconsin will offer into evidence column No. 1 of Exhibit 61 for identification, being a list of names of the customers.

PRESIDING EXAMINER: Is there any objection?

MR. SPARKS: No.

PRESIDING EXAMINER: That column alone doesn't mean much, it seems—

MR. HONECK: (Interrupting.) Well, I'll offer it.

PRESIDING EXAMINER: All right.

MR. HONECK: Is it received, your Honor?

PRESIDING EXAMINER: Yes, it will be received.

(COLUMN NO. 1 OF THE DOCUMENT REFERRED TO AS EXHIBIT NO. 61 WAS RECEIVED IN EVIDENCE.)

[2182]

MR. HONECK: Then the same parties will offer column No. 2.

PRESIDING EXAMINER: That will not be received. The ruling will be that that is irrelevant to the issues in this proceeding.

BLEED THROUGH

BLURRED COPY

MR. HONECK: We will offer column No. 3.

PRESIDING EXAMINER: Is there any objection?

MR. SPARKS: No.

MR. HONECK: That is the one headed "Mcf Purchased."

PRESIDING EXAMINER: Column No. 3, headed "Mcf Purchased", will be received.

(COLUMN NO. 3 OF THE DOCUMENT REFERRED TO AS EXHIBIT NO. 61 WAS RECEIVED IN EVIDENCE.)

MR. HONECK: We will offer column No. 4

PRESIDING EXAMINER: That column is considered irrelevant and will not be received.

MR. HONECK: The same parties will offer column No. 5 headed "Mcf Purchased Estimated Year Ending March 31, 1952".

PRESIDING EXAMINER: To make it short, columns 5, 6, 7 and 8, headed respectively "Mcf Purchased", "Revenue Present Rate", "Revenue Proposed Rate", and "Increase Under Proposed Rate", those four columns are considered irrelevant and will not be received in evidence.

MR. HONECK: Then at this time the State of Wisconsin and the Public Service Commission of Wisconsin desire to

[2183]

make an offer of proof of the columns which have just been ruled to be irrelevant, and we ask that they be made a part of the record under the rule.

PRESIDING EXAMINER: They will be so treated.

MR. HONECK: That is, in connection with the explanatory testimony that Mr. O'Leary has given.

PRESIDING EXAMINER: Yes.

The testimony of the witness, together with those portions of Exhibit No. 61, which have not been received will be transmitted by the reporter to the Secretary of the Commission, along with the documents which have been received and, of course, will become a part of the record of the proceedings to show what has been received and what has not been received.

BY MR. HONECK:

Q. Mr. O'Leary, are you familiar in a general way with the contract between Phillips and Michigan-Wisconsin Pipe Line Company, and its several amendments? A. Rather generally, yes, sir.

Q. Are you familiar with the escalator provisions thereof, in a general way? A. In a general way, yes, sir.

Q. Have you had occasion to make an approximate calculation of the percentage of the increase under the proposed rates which appears opposite the word "Grand Total"?

[2184]

That is the last figure on the right-hand side at the bottom of Exhibit 61. Have you had occasion to make an estimate of the percentage of that amount which will go to Phillips if the proposed increase is granted? A. I made such an estimate.

Q. What is the estimate?

MR. SPARKS: I object.

PRESIDING EXAMINER: The objection is sustained.

BLEED THROUGH

BLURRED COPY

MR. HONECK: I would like to make an offer of proof at this time, if your Honor please?

PRESIDING EXAMINER: All right.

BY MR. HONECK:

Q. Will you state what that percentage is? A. Roughly on the order of 20 per cent.

Q. In dollars and cents what is an approximate figure? A. Between 700 and 750 thousand.

MR. HONECK: That is all.

PRESIDING EXAMINER: Does Staff Counsel have any questions?

MR. McALLISTER: I have no questions.

PRESIDING EXAMINER: Counsel for the Respondent?

MR. SPARKS: In connection with the offer of proof there, may I ask this question?

BY MR. SPARKS:

Q. These figures you gave of 700 to 750 thousand was

[2185]

in reference to the grand total shown in the last column rather than with reference to the total which is as shown in the last column, is that right? A. That is correct, Mr. Sparks.

Q. What is the pressure base of these volume figures? A. I think it is 14.65, as I recall it.

Q. Where is that pressure base shown? A. Do you mean on the exhibit?

Q. If you have it there, I'd like to have you check it because the volume figure doesn't mean anything unless

you have a pressure base attached to it. A. 14.735.

* * *

[2221]

GEORGE P. BUNN

resumed the stand, and after having been duly sworn, was examined and testified further as follows:

Redirect Examination by Mr. McAllister

* * *

[2256]

Q. Would it be true that Exhibit 62 would be typical of all or a vast majority of the casing-head gas contracts covering gas purchases and processed through the Goldsmith Plant? A. In greater measure, I'd say it was typical, probably to the extent of some 80 per cent of the purchases there.

Q. How many different types of contract would there be covering the 100 per cent of the gas going into that plant? A. Well, even on this printed form from one producer to another, there will be differences, so that you could say probably there are as many kinds as you have purchase contracts.

Q. What I was really thinking of was the form. This form No. 5265 cht. A. I say that about probably around 80 per cent of the purchases at this point are on this basic form subject to such variations as are interlineated or added or written in.

BLEED THROUGH

BLURRED COPY

Q. Then the other 20 per cent would be covered by contracts prepared on how many additional kinds of contracts? A. I don't know offhand, but I would judge as many as

[2257]

maybe three or four basic forms.

Q. Where there are interlineations and changes, are those based upon bargaining between the parties, so to speak? A. Yes, in most instances that is the case.

Q. In other words, you might have, looking at page 2 or item 9, item 8, on this contract, the price in the first blank there is 2.0545, and on the next line there is a blank and it has 1.3399 cents, but now you might—do you have different figures and different prices under those circumstances applicable to gas purchased from adjoining leases? Would they be different? A. Not ordinarily, no, sir.

Q. Are they generally uniform in that given area? A. For a given plant we would ordinarily be the same in this series of contracts applicable on this form to that plant.

Q. Then the bargaining is for the first guy who sells, then, and the others have to fall in line more or less? A. As far as that particular blank is concerned, no, I wouldn't say that. The blank ordinarily is something that depends upon the general quality of the gas supplied to or anticipated for a plant.

[2258]

Q. We got to that question we were talking about last night and you told me you paid for gas flared. Now, on looking at this form, tell me where the element of gas flared

is brought into consideration here and in any way enters into the computation of price going to the seller of casinghead gas? A. In paragraph 2 of Exhibit 62, delivery date, it is provided that the delivery of the gas shall begin on the first day of the month of the execution of the contract, and that failure by buyer to accept delivery by said date shall obligate buyer to pay as full consideration for the volume thereafter produced and not taken by buyer.

Q. Go on down to column 3, paragraph 3. A. I beg pardon?

Q. Paragraph 3. Even though the total amount of gas that the seller measures into the system, nevertheless in the last analysis it is related to the volume sold, is it not, so that there is flared gas, there is no volume that is flared that could be included in that volume sold? A. That would depend upon the particular contract. We have contracts which provide that whether or not we take it or whether we have capacity for it, we still pay for all the gas produced.

Q. You said this is 80 per cent in that— A. (Interrupting.) I said the printed basic form was but each one of the printed basic forms may be interlineated

[2259]

and changed.

Q. There is no interlineation on this one we have been talking about which is Exhibit 62? A. Not with respect to that particular point that has just been mentioned, no, sir; but that does not mean that in other purchase contracts at this plant here aren't such adjustments in the printed form.

BLEED THROUGH

BLURRED COPY

Q. Would you say that that represented 80 per cent where you would pay for gas even if flared? Just to cut it short, as a matter of fact, I haven't been able to find any bill or contract yet, and I don't mean to say that I have seen any relative percentage of them, but I haven't seen any of them yet whereby formula or otherwise you take into consideration the volume of gas flared in determining the gas element in the price paid for gas purchased? A. I'll give you an example. At Crane plant we pay for gas produced by Gulf Oil Corporation and we didn't have any lines near it by several miles and we paid for a gas for a matter of 15 years and never got any of it, by contract.

Q. How much did you pay for it per Mcf? A. Exactly what we would have paid if we had taken it into the plant.

Q. That was your election to do it? A. No, it was a contract obligation.

Q. I mean a contract obligation. You could put a plant

[2260]

in there and processed it if you wanted to? A. That is right.

Q. What I'm talking about is where you take the gas into a plant and in the majority of the cases that portion that is flared is not included in the volume which the price is computed to the seller? A. All gas that we take into the plant we pay for, whatever it happens to be.

Q. Technically you pay for it. A. We absolutely do, technically or otherwise, we pay for it.

Q. You pay for it, but the amount per Mcf that you pay for the gas, the gas element in the price per Mcf, is based upon the volume that you sell and the volume that

is flared is not considered? A. I don't know whether I understand you or not.

Q. I'll go at it another way. The dollars you receive for gas sold— A. (Interrupting.) That we receive for gas sold?

Q. Yes, the dollars you receive for gas sold is the basic consideration which determines the price that he gets for the gas element in the gas purchased from lease, casinghead gas? A. In the usual case the price factor based upon our sales of gas from a given plant is determined from that which

[2261]

is sold from the plant.

Q. That is right, and the money which you receive is the money by which you determine the amount that he is to receive? A. That is right.

Q. So that in that computation the gas is flared, you get nothing for it— A. (Interrupting.) Now, which gas is flared?

Q. The gas that is flared out of the plant. A. The residue gas?

Q. The residue gas. A. That which we do not sell and do not use under circumstances where it is regarded as a sale by the terms of the contract and which is flared as a surplus would not enter into the price computation.

Q. So when you say— A. (Interrupting.) We are paying for all gas we buy.

Q. Well, my thinking is just a little different. What is flared represents no gain if a large portion is flared the

BLEED THROUGH

BLURRED COPY

price goes down per Mcf that the seller will receive? A. Where it is based on this type of purchase, yes, sir.

* * *

[2271]

Recross-Examination by Mr. Sparks

Q. Mr. Bunn, you testified, I believe, that the form which was used in entering into this contract which is Exhibit 62, was a form which had been used on some approximately 80 per cent of the contracts for the purchase of gas at the Goldsmith Plant? A. Yes.

Q. Is this same form used for the purchase of gas at the other three plants which we have been discussing in the Permian Basin, the Crane, Fullerton and Eunice Plants?

[2272]

A. Yes, in varying degrees.

Q. Do you know the approximate number of the contracts at the Eunice Plant which are on this form? A. I don't recall the number, but almost a hundred per cent of the contracts at that plant are on this basic printed form.

Q. Do you know the approximate proportion of the contracts for the purchase of gas at the Fullerton Plant which are on this form? A. They are about the same as at Goldsmith, about 80 per cent of them.

Q. And at Crane Plant? A. Around half of the contracts, I believe, there.

* * *

[2284]

Q. Incidentally, the references on Exhibit 63 to paragraph numbers and table numbers that are contained in

these column headings are to paragraphs and tables in the form of contract which is represented here by Exhibit 62, is that not correct? A. Yes. It may be noted from the serial heading of the form used on page 2 of Exhibit 63 that it is similar to that form number used for the contract. In other words, there are companion forms.

Q. Having calculated as shown on the statement here that the column 7 for this particular lease, there was 12,904 Mcf gas sold allocable to seller or this lease, then in column 8, there appears some decimal figures which amount to 4.92 plus cents daily weighted average price per Mcf, defined paragraph 8. I wish you'd look at paragraph 8 of the contract, Exhibit 62, and explain just generally the manner in which that weighted average price figure is derived in actual practice. A. That weighted average price is arrived at by averaging in proportion to the volumes sold, the several volumes sold, the prices received by Phillips for gas sold during the sale month for which the statement is made, whether that gas be residue gas or raw gas, and whether or not it be sold to a third party or under some circumstances used by seller himself, that is, by Phillips itself, in which case certain such uses are defined by the contract by paragraph 8 as sales and such

[2285]

uses as sales would be included in the determination of the weighted average price.

Q. Just so the record will be straight, I believe you referred to Phillips as the seller. In this contract, Exhibit 62, Phillips is referred to throughout the contract as buyer,

BLEED THROUGH

BLURRED COPY

isn't it? A. What I meant to say or to do there was to refer to Phillips as the seller of the residue gas or of raw gas which is used in the determination of the weighted average price, but Phillips, insofar as Exhibit 62 is concerned, is defined as the buyer of the raw gas from the producer involved in this case.

* * *

[2309]

MR. McALLISTER: I want to cut it down as much as I can and I don't want to waste time on preliminary questions and matters of simple little questions that don't run to the very heart of the offer.

MR. SPARKS: No, I'll not—as to these exhibits 18, 19, 20 and 21, I'll not raise any question with regard to the authenticity as it appears on the face of the exhibits.

MR. McALLISTER: The question is simply to the relevancy at this stage upon the issue we are trying.

MR. SPARKS: Do I understand you have offered all four of them?

MR. McALLISTER: I have offered all four of them and I want to be heard on my offer right now.

* * *

[2355]

That being the case, the ruling is that Exhibits 18, 19, 20 and 21, taken together as one are irrelevant to the issues in this hearing.

The ruling is further that Exhibits 19, 20 and 21, taken either together or separately are irrelevant to the issue in the proceeding.

MR. McALLISTER: Then I offer Exhibit 18 separately.

MR. SPARKS: The same objection. I don't believe I ever did state a formal objection. May it be considered that

[2356]

respondent has objected to each of the Exhibits 18, 19, 20 and 21 on the ground that they are irrelevant and immaterial to any issue in the case.

PRESIDING EXAMINER: Yes.

MR. McALLISTER: I think that is fairly clear on the record that you objected.

PRESIDING EXAMINER: I think so. I considered it that way at any rate.

As a matter of fact, by referring back to the record I see there is an objection pending to a question which was asked the witness and it has not been disposed of and neither has the question been answered. We then got into the question of the objections to these exhibits.

MR. McALLISTER: I'd like to have a ruling on my exhibit 18, Mr. Examiner.

PRESIDING EXAMINER: The objection to Exhibit 18 is overruled, and that Exhibit is received in evidence.

(THE DOCUMENT ABOVE REFERRED TO AS EXHIBIT NO. 18 WAS RECEIVED IN EVIDENCE.)

PRESIDING EXAMINER: It must be understood, of course, that any interrogation with respect to that exhibit must not involve the matter of rates, because obviously the matters might be gone into in oral testimony that were gone into in these other matters.

MR. HONECK: Mr. Examiner, the State of Wisconsin and

BLEED THROUGH

BLURRED COPY

[2357]

the Public Service Commission of Wisconsin at this time desire to make an offer of proof of Exhibits 19, 20, and 21, under the rule.

[2358]

PRESIDING EXAMINER: Exhibits 19, 20 and 21 will be marked by the reporter, excluded, offer of proof, exception and be filed by the reporter along with those exhibits which have been received in evidence with the Secretary of the Commission.

PRESIDING EXAMINER: I assume, of course, that the Wisconsin Commission is adopting these exhibits as his own when he makes this offer of proof.

MR. HONECK: That is correct.

PRESIDING EXAMINER: They were not originally his exhibits.

MR. HONECK: They are being adopted by Wisconsin and being offered by Wisconsin.

PRESIDING EXAMINER: The same ruling, of course. I mean the ruling will be the same with respect to the offer of Wisconsin.

* * *

[2421]

MR. HONECK: At this time, Your Honor, I would like to complete the record as far as I can by the offer of Exhibit 60, because counsel for the Public Service Commission and I are going to trade this over the week end. He'll be here next week, and I want to be in position to brief him on

what has transpired up to date so he can pick up from here on Monday, and I would like at this time to offer Exhibit 60.

MR. SPARKS: May the objections which we have already made to that Exhibit be considered in connection with the offer?

PRESIDING EXAMINER: Yes, they may.

MR. SPARKS: I'll restate it to the extent of stating our objection as to the relevancy and materiality of the exhibit with the sole exception of the gas purchase contract, as to which we do not object. We do object to the exhibit as a whole.

* * *

[2422]

PRESIDING EXAMINER: The objection is overruled. Exhibit No. 60 is received in evidence.

* * *

[2466]

C. O. STARK

resumed the stand, and having been previously sworn, testified further as follows:

[2470]

Examination by Mr. Torkelson

Q. Mr. Stark, I'll show you the documents which have been marked for identification as Exhibit 68, 69, 70, 71 and 72. Will you please examine them? Have you examined those documents? A. Yes.

BLEED THROUGH

BLURRED COPY

[2471]

Q. Are those documents from your files in the office of Phillips Petroleum Company? A. Yes.

* * *

Q. Are these documents which we have just referred to the so-called economic study on which you relied when you signed this contract which is in evidence as Exhibit No. 60? A. Yes.

* * *

[2726]

PRESIDING EXAMINER: Exhibit No. 79 is received in evidence.

(THE DOCUMENT ABOVE REFERRED TO AS EXHIBIT NO. 79 WAS RECEIVED IN EVIDENCE.)

MR. TORKELSON: We now would like to call Mr. K. E. Beall. Whereupon,

K. E. BEALL

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Torkelson

Q. Your name is K. S. Beall? A. K. E.

Q. You are an employee of Phillips Petroleum Company? A. Yes, sir.

[2727]

Q. Where do you live? A. Bartlesville.

Q. What position do you occupy with Phillips Petroleum Company? A. Vice-president of the economics department.

* * *

[2729]

Q. Did Mr. Learned ask you to make the economic studies which have been identified as Exhibits 69, 70, 71 and 72? A. Yes, sir.

* * *

[2732]

MR. TORKELSON: Mr. Examiner, I feel that these documents speak pretty much for themselves and I offer at this time in evidence, Exhibits 68, 69, 70, 71 and 72. I will, your Honor, retain them in my possession for the purpose of having copies made, as we have indicated, and then I will return the documents that have been furnished to me by Mr. Sparks to Mr. Sparks by registered mail or by messenger.

* * *

[2733]

Examination by Mr. McAllister

Q. You referred to Mr. Learned and stated, I believe, Mr. Beall, that it was he who instructed you to prepare these first of these economic studies, is that right? A. Yes, sir.

Q. In what capacity did he make that request? A. He was assistant to Mr. Endacott, the Executive Vice-president.

BLEED THROUGH

BLURRED COPY

Q. Did he hold any position on the Executive Committee? A. I believe not at that time. He was the Chairman of the Operating Committee at that time.

Q. He was Chairman of the Operating Committee? A. That is right.

Q. Is Mr. Endacott also a member of the Operating

[2734]

Committee? A. No, Mr. Endacott was a member of the Executive Committee at that time.

Q. So Mr. Learned in making the request was acting as, you might say, Chairman of the Operating Committee and assistant to Mr. Endacott and it was normal and natural for him to ask you to make a report of this kind to Mr. Endacott? A. Yes, sir.

Q. Does that more or less follow the pattern of studies that you make otherwise when Mr. Learned comes to you and says I'd like to have a report on so and so, an economic study, for Mr. Endacott? A. Yes, sir, it happens frequently.

Q. I believe you stated Mr. Endacott was at that time Executive Vice-president and is now President of Phillips Petroleum Company? A. Yes, sir.

Q. What position does Mr. Learned hold in the organization? A. He is the Executive Vice-president.

Q. He succeeded Mr. Endacott as Executive Vice-president? A. Yes, sir.

* * *

[2737]

PRESIDING EXAMINER: Are there any other questions of the witness at this time?

MR. SPARKS: Not at this time. I'd like to state my objection.

PRESIDING EXAMINER: All right.

MR. SPARKS: To Exhibits 68, 69, 70, 71 and 72. I object to all of the exhibits as a group and separately as to each of them on the ground that they are immaterial and irrelevant to any issue in this proceeding.

* * *

[2742]

PRESIDING EXAMINER: The question is just how far we are going into the details underlying and behind the entering into of the contract.

* * *

[2747]

PRESIDING EXAMINER: You have the contract in the record, the only question is how far we are going now into the investigation and study of the background of this contract, that is all?

* * *

[2752]

MR. TORKELSON: So far as having any ruling turn on how far we can go into inquiring into these things, I do think that it is of importance to show that this is an unusual transaction and we are not going into every one well farm-out or anything like that.

PRESIDING EXAMINER: You understand, of course, that a line has to be drawn somewhere.

* * *

BLEED THROUGH

BLURRED COPY

[2759]

PRESIDING EXAMINER: The objections, therefore, to Exhibits 68, 69, 70, 71 and 72 are sustained.

MR. TORKELSON: May I, Mr. Examiner, make an offer of proof with respect to each of the exhibits?

PRESIDING EXAMINER: Yes, you may.

[2760]

MR. TORKELSON: I ask that the documents marked for identification as Exhibits 68, 69, 70, 71 and 72, stand in the record as and for our offer of proof with respect thereto.

PRESIDING EXAMINER: They will be so construed.

The exhibits will be marked by the reporter, excluded, offer of proof, exception, and be filed with the Secretary of the Commission along with those exhibits which have been received in evidence.

* * *

[2812]

MR. SPARKS: Yes, that is fine.

I offer Exhibit 81 in evidence.

MR. McALLISTER: I stated my objection, Mr. Examiner.

PRESIDING EXAMINER: The objection is sustained to Exhibit 81.

MR. SPARKS: As tender of proof the witness, if permitted to testify, would testify that the wells, numbers of wells, shown on the exhibit taken from the books and records of the company kept in the ordinary course of business, that the witness made classification on the exhibit

which are "Drilled for new fields" and "Drilled for extensions of producing fields" and "Drilled for new producing zones in producing fields" by an examination of the maps of the company to determine under which of the categories each of the wells should fall, and that the witness perpared it, calculated it, figures appearing under the heading per cent on the right-hand side of the exhibit.

I believe that is all.

* * *

[2813]

GEORGE P. BUNN

resumed the stand, and having been previously sworn, testified further as follows:

Direct Examination

* * *

[2819]

MR. SPARKS: Mr. Examiner, I would now like to have identified as Exhibit 82 a map of the State of Oklahoma and a portion of the states of Texas, New Mexico, Colorado, Kansas, Missouri, Arkansas and Louisiana and it is sheet 1 of Kelly's Map of the United States.

PRESIDING EXAMINER: That will be marked for identification as Exhibit No. 82.

* * *

[2923]

BY MR. SPARKS:

Q. Mr. Bunn, this form, in paragraph A has a number

BLEED THROUGH

BLURRED COPY

of blanks, and I am speaking of Exhibit 89, the casing-head gas division order. Are those blanks ordinarily filled in in the same manner that the comparable blanks are filled in in paragraph 8 of the casing-head gas contract which is Exhibit 62? A. Yes.

Q. I notice that the division order also has another place for signature at the bottom of the page under which is listed owner. Who signs there? A. The same people who are to receive interest under this agreement.

Q. And then there is a place for signature by Phillips Petroleum Company? A. Yes.

[2924]

Q. Mr. Bunn, aside from variations from plant to plant due to the manner in which the blanks are filled in or some other special variation, and as far as the form is concerned, is the basis of payment under the, provided for under the, casing-head gas division order the same as that under the casing-head gas contract to casing-head producers from whom gas is purchased? A. Yes, with the same possible minor variations from agreement to agreement.

Q. If the statement which is Exhibit 63 in this record with a statement covering a royalty interest at the Goldsmith plant, in other words, a statement covering the Phillips lease at the Goldsmith plant, instead of a Stanolind lease and an accounting was to be made to the royalty owners, under this division order, Exhibit 89, the same method of accounting would be followed, would it not, in the statement as to the factors involved and would operate in the same manner? A. Yes, the same method of accounting

would be pursued on the same forms as is indicated in Exhibit 63.

Q. Just so it is clear, Exhibit 63 shows quite a number of small interest owners, does it not? A. On page 3 of Exhibit 63, yes, there are quite a number of owners indicated there, many of whom have small interests.

Q. And they are royalty owners, are they not? Can you tell by examination of the interest there that they are royalty owners?

[2925]

MR. McALLISTER: It might be property owners, too, would it not?

MR. SPARKS: Royalties are property, Mr. McAllister.

MR. McALLISTER: I know, there might be something down in the bottom of the hole, but the other fellow owns the surface.

THE WITNESS: I don't know about every one of them, but I do know that a number of them are royalty owners.

BY MR. SPARKS:

Q. If you added up the interest accredited to Stanolind and the interest accredited to Atlantic, the two signors of the sales contract which is Exhibit 62, would you get 7/8 interest? A. Yes, you get 87-1/2 per cent by adding the decimal ownership there.

Q. From that would you deduce the balance of them were royalty owners? A. Yes; that would be a very good indication in that the whole adds up to one or to a hundred per cent and the other 1/8 is ordinarily typical royalty.

BLEED THROUGH

BLURRED COPY

Q. Assuming that these are royalty owners for the purpose of the question, does Phillips Petroleum Company have assigned any instruments similar to Exhibit 89 with these royalty owners? A. Oh, yes. Where we have division orders as on form 89 on other leases.

Q. Assigned with royalty owners under the Stanolind lease?

[2926]

A. There may be some of the same people, but for leases that Phillips Petroleum Company rather than Stanolind's.

Q. I am speaking of them as royalty owners under the Stanolind lease. Would you have such a division order signed covering the Stanolind lease? A. No, sir.

* * *

[2935]

Q. Mr. Bunn, was Exhibit 91 prepared under your supervision and direction? A. Yes. This map was prepared as I directed from the various records of the company from which we could prepare the various kinds of data shown hereon

* * *

[2939]

Q. If you were writing about that line which forms a T right above section 30, immediately south of what you

[2940]

described as Section 19, how would you describe that line? A. Well, ordinarily—

Q. (Interrupting.) I mean not ordinarily, but right now from this map, which would give us sufficient designation that we'd know what it was. A. Well, what I would do right now would not be what we'd do ordinarily, but I'll tell you what we'd do now if we were to do that. We would speak of the gathering line running north and south about a quarter of a mile west of the north and south section line along the east side of Section 30 in Block 44, Township 1, south, Texas, and Pacific Railway.

* * *

[2949]

Q. What is the black and yellow? A. That is the line to which we referred yesterday on another map as the Mextex line, which was the natural gasoline production line running out of the Permian Basin to near Borger.

Q. To Borger? A. To near Borger.

Q. Why do you say near? A. because it isn't at the town. It is more nearly the town of Phillips, Texas, which is northwest of Borger a few miles, but it isn't in the town of Phillips, it is near that.

Q. Where does it go actually? A. That is where it ends.

Q. Does it run out into a lake or something? A. No, it goes to a plant owned by Phillips at that point, which we call Borger fractionator.

Q. And that is where it is converted into butane, propane or other products which might be made out of natural gasoline? A. Yes, sir.

[2950]

MR. McALLISTER: Thank you, Mr. Sparks. I didn't mean to interrupt, but I mean sometimes—

BLEED THROUGH

BLURRED COPY

MR. SPARKS: (Interrupting.) That's all right, I was going to ask that question anyway.

BY MR. SPARKS:

Q. And the red solid lines on the map— A. (Interrupting.) The red what?

Q. The solid red lines on the map, what are they? A. The solid red lines are gas gathering lines that are in and operating.

* * *

[2999]

Q. Mr. Bunn, do you have copies of Exhibits 99, 100, 101, and 102? A. Yes, sir.

Q. Will you please examine them and state whether or not they are aerial photographs taken of the plants which

[3000]

appear by name on each of the photographs? A. Yes, sir, these are all aerial photographs which we had made to show these four plants and their immediate environs.

Q. What was the approximate date when these photographs were taken? A. I don't recall the exact date, but it was sometime last summer; it seems to me it was about July or August of last year.

MR. McALLISTER: On Exhibit 102, it says "proposed delivery point to El Paso". Is that an actuality?

THE WITNESS: That is the actual delivery point, yes, sir.

* * *

[3049]

MR. SPARKS: Mr. Examiner, we request that a tabulation marked "Percentage of Gas Supplied by Gulf Oil

Corporation Based on Volumes for March, 1951", be marked as Exhibit 95-A. That was the information which we were to supply with regard to that.

PRESIDING EXAMINER: It will be so marked.

* * *

[3050]

MR. SPARKS: Mr. Bunn, were Exhibits 95-A and 96-A prepared under your supervision and direction? A. Yes, sir.

* * *

[3051]

MR. SPARKS: We request that a map which is entitled "Panhandle and South Part of Hugoton Field" be marked for identification as Exhibit No. 103.

PRESIDING EXAMINER. It will be so marked.

* * *

[3052]

BY MR. SPARKS:

Q. Mr. Bunn, was the map of the Panhandle field and the south part of the Hugoton field, which is Exhibit 103, prepared under your supervision and directions? A. Yes, sir.

* * *

[3055]

BY MR. SPARKS:

Q. Mr. Bunn, the basic information with regard to the lines, Phillips lines, which appear on this map, were the same basic maps and information from which certain maps

BLEED THROUGH

BLURRED COPY

were prepared which have been furnished to the Staff and used by the Staff in this proceeding and have been brought up to date by the Staff in this proceeding, isn't that correct? A. Yes, sir; I understand that the same information was supplied the Staff from which the lines on this map were made.

Q. And an attempt has been made to see that the lines as brought up to date and checked for this map were the same as those which have been furnished to the Staff? A. We attempted to furnish the Staff with the same information from the same sources as this map was brought up to date from.

Q. That is, insofar as, of course, the maps of the Staff contain and reflect the same type of information as shown on this map?

[3056]

A. Yes; to the extent that they desired it they have had the availability of the same information.

Q. What area is covered by the map? A. Well, the map covers a portion of the Panhandle of Texas and a portion of the Panhandle of the State of Oklahoma, and covers quite a number of counties which are shown on the map in the two states combined and shows by the outlines on the map the major portion of the Panhandle field and about the southern one fourth of the Hugoton field. The map describes the portions of the total Panhandle field which is shown on the map by the labels in green in large letters "West Panhandle field" and "East Panhandle field", which are subdivisions of the greater Panhandle field made by

the Railroad Commission of Texas. The portions of the Hugoton field which extends through part of Texas, the Panhandle of Oklahoma and into a part of Kansas is labeled on the map insofar as that part of it is shown as "South Hugoton field" in green letters, including the portion of the Hugoton field which is in Texas and a portion of the Hugoton field which lies in Oklahoma.

Q. The word "South" that is used in connection with Hugoton on the map, is that used to indicate that there was a south Hugoton field as a field distinguished from the Hugoton field as a whole or merely to show that that was the southern portion? A. That is merely to show that geographically this is

[3057]

the southern portion of the Hugoton field.

Q. And you stated the map doesn't show about the north three fourths of the Hugoton field. Does Phillips own any substantial number of leases in that part of the Hugoton field? A. In the part of the Hugoton field which is not shown on this map, that is, the remaining approximately three fourths Phillips has very few leases.

[3058]

Q. I notice a dash line running generally in a north and south direction to the right of which there is the language in green letters, "East Panhandle Field", and to the left of which is "West Panhandle Field". Is that dashed line to represent the division between those two fields as they have been described and defined by the Railroad Com-

BLEED THROUGH

BLURRED COPY

mission for proration purposes? A. Yes. That heavy black dashed line is the description or is the location of the latest description of the Railroad Commission as to the boundary between those two portions of the Panhandle Field.

Q. And near the center of the map between the West Panhandle Field and the South Hugoton Field there is also a dashed line, what does that represent? It is a heavy dashed line? A. The heavy dashed line from the point of intersection of the northeast corner of Hutchinson County, the northwest corner of Hutchinson County, and the northeast corner of Moore County and running generally southwest from that point is the location of the division between the Hugoton Field and the Panhandle Field as prescribed by the Railroad Commission of Texas.

* * *

[3094]

MR. SPARKS: The two symbols as shown on this map are a division of the part interest leases, that is, leases under which Phillips owns a part interest and someone else owns a part interest in the two different categories, one of them being leases in which Phillips owns a portion of the oil and gas rights, that is, under the lease, the other being a situation where Phillips owns all of the gas rights but none of the oil rights.

Q. That is a correct statement, is it not, Mr. Bunn? A. No, the last statement, I believe, should be reversed, in which Phillips owns many oil rights and not the gas rights.

Q. Did I say it the other way?

[3095]

A. Yes. All acreage colored with two colors is correctly colored as far as I have checked it in that Phillips has part interest in all such properties. In the case of the two colored properties with the circle shown on Exhibit 104, the interest in such cases which Phillips has is applied to the oil and casing-head gas only, in which case it owns all of those rights under such properties and none of the rights in wells which produce dry gas only, and it has contracts for the purchase of the dry gas rights in those cases and in the other cases without the circle contracts for the purchase of any gas.

Q. When you said contract for purchase of dry gas rights, you mean the purchase of gas produced dry gas? A. Yes.

MR. McALLISTER: One other point I'd like to clear up there. You show here a red line, a gas gathering line, and then you show residue lines. Is that merely descriptive terminology that you have used on here and you don't undertake by including that description on the map to differentiate between a residue line and a natural gas line if somebody wants to call it a natural gas line, do you?

THE WITNESS: They could call it anything they want, that is right. The residue line as depicted here, it is depicted as such merely for convenience of distinction of the kind of gas moved through the lines. Some are called residue lines and

[3096]

they are labeled that way for convenience.

BLEED THROUGH

BLURRED COPY

MR. McALLISTER: And on the gathering lines you merely mean the lines that lead to the vicinity of the leases and which connect with lines from the leases to the gasoline plants?

THE WITNESS: Well, the gathering lines are the lines which take part in the gathering of the gas from the wells and leases.

* * *

[3109]

Q. Mr. Bunn, is Exhibit No. 105 a photostatic copy of a casing-head gas contract between Champlin Refining Company and Danciger Oil & Refining Company as sellers and Phillips Petroleum Company as buyer, which is one of the casing-head gas contracts you have with producers of casing-head gas in the area covered by the Exhibit 104? A. Yes, sir.

MR. SPARKS: I assume, Mr. McAllister I don't need to read through—

MR. McALLISTER: (Interrupting.) No, not at all.

BY MR. SPARKS:

Q. Is this contract on a form which is generally representative of the other contracts under which you purchase casing-head gas for processing in the plants that are shown on Exhibit No. 104? A. Yes. This is a typical basic printed form of contract used in that area.

Q. You testified about Exhibit 62, which was basic form of contract under which Phillips purchased casing-head gas in the Permian Basin, did you not?

[3110]

A. I don't recall the exhibit number, but I did, yes, testify concerning a typical basic printed form contract for that area.

Q. This is a slightly different form? A. Yes, sir; it is not quite the same in its provisions with the other contract.

Q. Both of them, however, do include provisions for the return of residue gas for lease operations, do they not? A. Yes, sir.

Q. And each of them also includes a payment to be made, the amount of which is dependent on the gasoline content of the gas and the current price of 26-70 natural gasoline or crude oil? A. Would you read that question, please? (The question was read by the reporter.) A. The payment is dependent on that in part, yes.

BY MR. SPARKS:

Q. In part. And each of them also contains payment provisions under which payment in part is determined by the price received for residue gas which may be sold by Phillips? A. Yes. The price received by Phillips as defined in the contract.

Q. As defined in the contract? A. Yes.

Q. Exhibit No. 106, is that a statement, monthly statement

[3111]

for the month of March, which was made to the sellers of the gas under the contract which is Exhibit 105? A. It is the statement from which statements to the sellers of gas are prepared.

BLEED THROUGH

BLURRED COPY

Q. This is what we call a master copy? A. That is right, the first page is and the second page is the listing of all interests which are paid, but statements that go to those interests carry only the information shown on the second page and the particular interest of the owner involved and the amount of money he receives.

* * *

[3140]

Q. Mr. Bunn, do you know approximately what per cent of the royalty owners who own dry gas royalties or gas well gas royalties under Phillips leases in the Panhandle and South Hugoton Fields have executed whichever of these Exhibits 109, 109A and 109B is applicable to his area?

* * *

THE WITNESS: We made an intensive campaign to get these

[3141]

forms executed in the areas mentioned and succeeded in getting something around 90 per cent of all of the leases covered by these agreements on applicable properties.

* * *

[3146]

Q. Does the map show the raw gas gathering lines beginning in the Hartley County in red? A. Yes. Gas gathering lines in general on the exhibit are shown in red.

Q. Is the area which is shown on this map often called the Borger area? A. Yes. This comprises in its general scope the area we refer to as the Borger area in our operations.

Q. Is it sometimes referred to, at least in the gathering lines, the system of the gathering lines referred to, as the

[3147]

Moore County gathering system? A. Yes, we use that term quite frequently.

* * *

[3208]

Q. Turn to Exhibit 117. I call your attention to the point marked on that exhibit as delivery point to Michigan-Wisconsin. Do you find that? A. Yes.

Q. Is the point that is so marked on Exhibit 117 the outlet of the bank of six meters which are shown on the flow sheet which is Exhibit 45-A? A. Yes, that is correct. I wasn't sure. You can't tell from the photograph, and I'm checking the contract here. The point is at the outlet of the meter station.

Q. Does Phillips own and operate those meters? A. Yes.

Q. And the facilities of Michigan-Wisconsin for receipt of the gas connect at the outlet of the meter station? A. That is right.

* * *

[3257]

Q. Mr. Bunn, you have been connected with the natural gasoline industry, I believe, since 1923, is that correct? A. No, since about 1916.

Q. And since 1923 you have been in the employ of Phillips Petroleum Company in a managerial position? A. Since 1921 I have been with the Phillips Petroleum Company.

BLEED THROUGH

BLURRED COPY

Q. And during that time, during your connection with the industry and particularly since your connection with the Phillips Petroleum Company, have you been acquainted with and do you have knowledge of the terminology which is used in the industry with reference to various facilities that constituted the facilities used in the operations of the natural gas and gasoline industry? A. I think I do, generally, yes, sir.

Q. As it is considered in the industry, from your knowledge of the operations of the industry, and Phillips Petroleum Company's operations in the industry, what are the functions that are ordinarily performed by a gatherer of natural gas? A. Well, in our operations we have from the beginning considered our operations as being those of gathering gas, and those operations which we have historically engaged in predominately have been in connection with our various plant

[3258]

installations whether they be handling casing-head gas or gas from wells producing gas only or gas from a combination of the two of which we have considered ourselves gatherers of gas in the collecting of the gas from the wells or leases in the qualifying or conditioning of the gas and conveying it to one or more points of disposal in or near the area where the gas is produced.

Q. Do you consider that the conditioning of the gas for disposal, both in the fractions that are disposed of in liquid and in gaseous form are a part of the functions of a gatherer? A. Yes. Historically the producer of casing-

head gas in this industry collected the gas on his own lease or from several of his own leases and he himself was predominantly the operator of a gasoline plant where such was installed and he collected the gas and processed it and conveyed it to points of disposal. His purpose was to do that. He found it desirable and economical to collect the gas from various wells, leading in various leases, to a common point or points of disposal so that the gas in the total quantity available from all sources was collected together at some one or more such points for the disposal necessary. He regarded the extraction of gasoline as a part of disposal and in cases where he sold the residue gas or where he utilized it even because of the hazard involved in directly using the richer casing-head gases for fuel, he

[3259]

considered the extraction facilities as partly qualifying or conditioning facilities in connection with his total operation of gathering in order to make the gas saleable or safe for use.

Q. When you were first employed by Phillips Petroleum Company was it then engaged in the business of collecting gas and processing it in gasoline plants and disposing of the residue gas? A. Yes, sir.

Q. And has it been engaged in that business in numerous plants and numerous situations since that time? A. It has been so engaged and all of its plants since that time. In the beginning, when I joined the company, we had three plants, and the residue gas from all of those plants was predominantly utilized or sold and it was the aim of the

BLEED THROUGH

BLURRED COPY

company and it was our definite intentions as a department as we saw the opportunity to broaden our operations and to become a collector, a gatherer, of gas for the fullest and most economic utilization and disposal that we could, wherever we could find such opportunity where gas was not so fully being utilized, either from the wells or even through existing plant and gathering facilities as we might find them.

Q. Now I wish you'd turn to Exhibit No. 86, Mr. Bunn. That is the map of the West Texas area. Does the term "Gathering lines" have a well defined and understood meaning in the natural gas and gasoline industry?

[3260]

A. Will you read that question, please? (The question was read by the reporter.) A. Yes, I think a very definite meaning in the industry.

Q. Has it had such a meaning since you first became connected with the industry and were first employed by Phillips Petroleum Company? A. Yes, sir.

Q. On this map, Exhibit 86, you observe the Crane plant, which is in the lower right-hand corner. That plant was constructed in what year? A. 1929.

Q. Has there been any substantial change in the red lines which are denominated gas gathering lines on this map, Exhibit 86, at the Crane plant since it was first constructed? A. Well, shortly after it was constructed we had to learn how to use, how to handle, how sulphide bearing gas. Until we learned that we lost quite a number of lines there by corrosion and they had to be replaced, in

the early years of the plant. Those lines, however, were replaced substantially in the same location as the lines which had to be removed, and the system as shown here in red other than that has not been substantially changed except for extensions. I mean by substantially changed that more of the original system is depicted in the lines shown than anything which has been added or changed since.

[3261]

Q. As the term "Gathering line" has been known in the natural gas and gasoline industry since your connection with it, are the red lines which are denominated gathering lines on this map and which collect gas which is processed in the Crane plant gathering lines within the meaning of that term as it is used and understood in the natural gas and gasoline industry? A. Oh, yes. Yes, sir. Historically I have never heard any other term used for those lines in general. They have always been called gathering lines. Sometimes they may be referred to simply as pipe lines or raw gas lines occasionally for distinction as among the many terms of equipment around the plant, but they have always been regarded and talked of as gathering lines.

Q. The map also shows in red and marked on the map as gas gathering lines through which gas is collected for processing at the Goldsmith, Fullerton, Eunice, Hobbs, Lee, Seminole and Judkins plants? A. Yes. Those lines shown in bright red on the map are similarly gathering lines for each of those respective plants.

Q. And within the meaning of that term as it is known and understood in the industry are they gathering lines? A. Yes.

BLEED THROUGH

BLURRED COPY

Q. And does that include the larger lines as they lead into the plant as well as the smaller lines? A. Why, certainly. The purpose of gathering is to get the gas to one or more points of disposal. You don't gather

[3262]

out on the prairie or in the middle of a lake some place and then just stop. You get to the point of disposal. All of those lines, the larger ones which are larger only because they carry more gas, are gathering lines along with the smaller ones.

Q. Did you ever hear anybody refer to those lines that are marked gathering lines on this exhibit as transmission lines? A. No, not in the sense that we understand transmission in the general sense. They are always called gathering lines.

Q. Now I wish you'd turn to Exhibit 104. Exhibit 104 also has on it some red lines which are denominated "Gas gathering lines" on the exhibit? A. Yes.

Q. Are those red lines gathering lines within the meaning of that term as it has been and is known and understood in the natural gas and gasoline industry? A. Yes, sir; and in addition those other lines which I stated this morning are actually installed in some parts of this field and not shown on the map for the collection of most of the casing-head gas.

Q. They are the lines that go to the casing head, is that what you are speaking of? A. Yes.

Q. Which are not depicted on the map? A. That is right.

Q. Now if you will look at Exhibit 111, you will see that

[3263]

it also reflects a large number of lines in red which are denominated on the map "gas gathering lines"? A. Yes.

Q. Within the meaning of gathering lines as that term is generally known and understood in the industry and has been known and understood in the industry for many years, are those red lines gathering lines, that is, the red lines on the map, Exhibit 111? A. Yes, sir, those are all gathering lines.

Q. Does that include the larger 24-inch lines as well as the smaller 4, 6 or 8 or 10-inch lines which lead to the wells? A. Yes, sir. There are not quite so many operators perhaps who have quite so extensive a system as shown on the exhibit, and they might not have as many of the larger sized lines as may be here, but the system and its purposes are identical with those elsewhere in the industry and would be classified as gathering lines.

Q. Now I call your attention to Exhibit No. 116. On that exhibit there appear some pink lines and some black lines, all three of which are designated on the exhibit as gathering lines, and I will ask you whether or not, as the term gathering lines is known and understood and has been known and understood in the industry, those lines so designated on the map, Exhibit 116, are gathering lines?

[3264]

A. Yes, sir, all those lines, whether solid or dotted, pink or black, when installed and serving in a system like this, would be called gathering lines, would be so considered by the industry.

BLEED THROUGH

BLURRED COPY

MR. SPARKS: I believe that is all.

One moment.

BY MR. SPARKS:

Q. I wish you would turn to Exhibits 12, 13, 14 and 15. Looking first at Exhibit 12, to the extent that the lines are shown through which gas is collected which is processed in the Sherman plant are the pipe lines which are shown on this Exhibit 12 gathering lines within the meaning of that term as it is and has been for many years known and understood in the natural gas and gasoline industry? A. Yes. I say that without having examined every feature of the map but recognizing from the title and the pattern of the lines here as representative of those lines supplying Sherman plant, I'd say those are gathering lines, would be so construed by the industry.

Q. The testimony in the record is that territory lines are not reflected on Exhibit 12, and it has been revised and the revised Exhibit 12 as Exhibit 12-A will be inserted in the record, but has not been done so as yet, as I understand it. Now I call your attention to Exhibit 13 and ask you to state whether or not the lines on that exhibit are gathering lines

[3265]

within the meaning of that term as it is known and as understood in the industry? A. As I recall how we have directed the installation of this system depicted here up to the latest moment, it does not quite correctly reflect the exact system, but if the connections with all as shown on this map, and most of it, I believe, is correct, all of those lines would be identified as gathering lines.

Q. And would be so considered in the natural gas and gasoline industry? A. Yes, that is right, all of them except the line here labeled Pepl Co. which may or may not be a gathering line.

Q. You mean the heavy dashed line? A. Yes.

Q. I call your attention to Exhibit 14 and ask you whether or not the solid black lines on that exhibit would not be considered gathering lines within the meaning of that term as it is ordinarily known and understood in the industry and in connection therewith and state to you that the testimony in this record is that said solid black lines are a bulk of the Phillips pipe line system in the areas shown by the map and that there is an understanding between counsel that certain minor additions and corrections will be added to Exhibit 14 and inserted in the record as Exhibit 14-A. A. Without again examining the map in complete detail

[3266]

and having some difficulty orienting myself for reason of the lack of geographic descriptions, sections and so on, I believe all the solid lines shown on here would be called gathering lines.

Q. I ask you if the same would be true with regard to the solid lines on Exhibit 15? A. Yes, in general again, looking at this exhibit, I believe that from a hasty examination all the lines shown thereon would be gathering lines.

Q. I call your attention now to Exhibit 48. Do you observe that exhibit? A. Yes.

BLEED THROUGH

BLURRED COPY

Q. Are the lines shown on that exhibit gathering lines within the meaning of that term as it is known and has been known for many years in the natural gas and gasoline industry? A. Did you finish your question?

Q. Yes. A. I'm not sure about it. Will you read it, please.

PRESIDING EXAMINER: Read the question. (The question was read by the reporter.) A. Yes. Without regard as to whether all the lines are shown or they are all shown exactly correctly, the system depicted hereon as the system which supplies Eunice plant gas would be called gathering lines.

Q. Would you look at Exhibit 49, which is a diagram of pipe line facilities at the Fullerton plant, and state whether

[3267]

or not the solid lines thereon, which are, according to the record in this case, the lines of Phillips Petroleum Company through which gas is supplied to the Fullerton plant, and state whether or not those are gathering lines as that term is known and understood in the industry? A. Yes, sir, those would be gathering lines.

Q. Turn to Exhibit No. 50 and state whether or not the same is true of the solid black lines on that map, which purport to be the lines through which gas is collected and processed at the Goldsmith plant? A. Yes. Again, without reference to the correctness of them, but represented as the lines through which gas is supplied to Goldsmith plant, these would all be gathering lines, and they would be so construed by the industry.

Q. I notice that one of the lines coming from the north, which appears to be marked "D", is a 26-inch line as it is shown on Exhibit 50. Do you find that line? A. Yes.

Q. Would that be a gathering line within the meaning of that term as it is known and understood in the industry? A. Yes, sir.

Q. There is another one from the south that is marked a 16-inch line. Would that be a gathering line? A. Yes, sir.

Q. And another one marked a 20-inch line. Would that be

[3268]

a gathering line? A. Yes, sir.

Q. Is the size of a line as it enters the plant yard in any way determinative of whether it is considered a gathering line in the industry? A. No, sir.

Q. Please turn to Exhibit No. 51. This exhibit purports to reflect the lines of Phillips Petroleum Company, that is, the solid lines on the exhibit purport to reflect the lines of Phillips Petroleum Company, through which gas is collected and from which gas is processed at the Crane plant. Are the lines shown on that exhibit gathering lines within the meaning of that term as it is ordinarily known and understood in the industry? A. The solid lines shown hereon, depicted to indicate the lines through which gas is supplied to Crane plant would be so regarded in the industry as gathering lines.

* * *

BLEED THROUGH

BLURRED COPY

BLEED THROUGH

BLURRED COPY

Nos. 280-281
418

FILED
AUG 20 195

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 11240

STATE OF WISCONSIN AND PUBLIC SERVICE COMMISSION OF WISCONSIN, Petitioners,

versus

FEDERAL POWER COMMISSION, Respondent

PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

FILED SEP 29 1952

No. 11241

CITY OF DETROIT, MICHIGAN, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent

PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

CLERK

No. 11242

CITY OF KANSAS CITY, MISSOURI, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent

PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

No. 11245

CITY OF MILWAUKEE, WISCONSIN, a Municipal Corporation, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent

PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

No. 11252

COUNTY OF WAYNE, MICHIGAN, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent

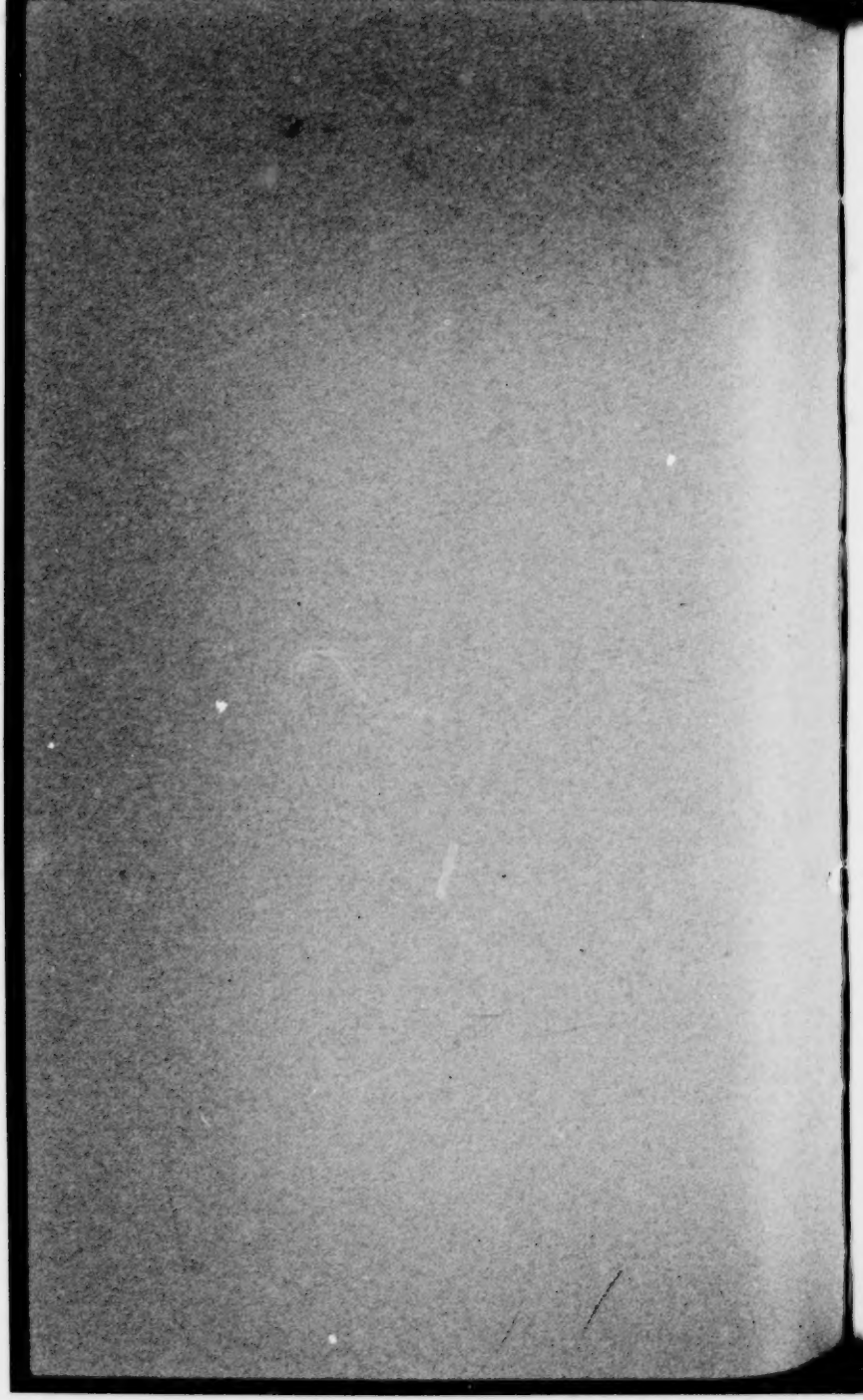
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

Review of An Order of the Federal Power Commission

CONTENTS

Testimony—Record Pages 3502-5799

THE OLSON PRESS, MADISON, WISCONSIN



BLEED THROUGH

BLURRED COPY

Volume II

JOINT APPENDIX

BLEED THROUGH

BLURRED COPY

INDEX

VOLUME I

	Record Page	Appendix Page
Joint and Several Petition of State of Wisconsin and Public Service Commission of Wisconsin to Review Orders of the Federal Power Commission in Its Docket G-1148, Filed November 20, 1951		1-33
Petition of City of Milwaukee to Review an Order of the Federal Power Commission in Its Docket No. G-1148 Relating to an Opinion and Order Entered by the Commission on August 16, 1951 (Order No. 217, Issued August 22, 1951), Filed November 15, 1951		34-43
Petition of City of Kansas City, Missouri, for Review of Order of Federal Power Commission, Filed November 14, 1951		44-56
Petition of the City of Detroit, Michigan, for Review of Order of Federal Power Commission, Filed November 14, 1951		57-72
Motion of Phillips Petroleum Company for Leave to Intervene, Filed January 29, 1952		72-77

	Record Page	Appendix Page
Order of United States Court of Appeals for the District of Columbia Circuit permitting Phillips Petroleum Company to Intervene, Dated February 9, 1952, Filed February 9, 1952		78-79
Motion of State of New Mexico, et al. for Leave to Intervene, Filed February 5, 1952		80-84
Order of United States Court of Appeals for the District of Columbia Circuit permitting State of New Mexico and Oil Conservation Commission of State of New Mexico to Intervene, Dated March 3, 1952, Filed March 3, 1952		84-86
Motion of the Corporation Commission of the State of Oklahoma for Leave to Intervene, Filed April 9, 1952		87-96
Answer of State of Wisconsin and Public Service Commission of State of Wisconsin to Motion of the Corporation Commission of the State of Oklahoma for Leave to Intervene, Filed April 16, 1952		96-99
Motion of the State of Texas Through the Railroad Commission of Texas for Leave to Intervene, Filed April 10, 1952		100-106

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
Stipulation With Respect to the Motion to Intervene of the State of Texas Through Its Railroad Commission and the Corporation Commission of the State of Oklahoma and the Motions of the State of Wisconsin and Its Public Service Commission to Dismiss the Aforesaid Motions to Intervene, Filed May 7, 1952		106-111
Order of the United States Court of Appeals for the District of Columbia Circuit Permitting Corporation Commission of State of Oklahoma to Intervene, Dated May 12, 1952, Filed May 12, 1952		111-114
Order of the United States Court of Appeals for the District of Columbia Circuit Permitting the State of Texas Through the Railroad Commission of Texas to Intervene, Dated May 12, 1952, Filed May 12, 1952		114-117
WITNESSES		
Testimony of:		
Marsh, Edward (Presiding Examiner-opening statement)	7-9	118-119
Luttring, Carl E.		
Direct examination by Mr. McAllister	94, 100 101-106 111-112	119-120 120-123 124

	Record Page	Appendix Page
Etchieson, W. S.		
Direct examination by Mr. McAllister	150-152	124-126
	170	126
	173	127
	176-178	127-129
	184-186	129
Walters, Mason G.		
Direct examination by Mr. McAllister	225-226	130
	250-252	130-132
	259-261	132-134
Etchieson, W. S. (recalled)		
Direct examination by Mr. McAllister	265	134
	292-302	134-142
	306-311	142-146
	317-319	146-148
	325-326	148
Cross examination by Mr. Sparks	327	148
	338-339	149-150
Adams, Kenneth S.		
Direct examination by Mr. McAllister	370	150
	407-413	150-155
	445-453	156-161
	455-457	161-163
	466-472	163-168
	505-507	168-170

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
Etchieson, W. S.		
Direct examination (resumed) by Mr. McAllister	645-646	170
	657-658	171
	734-737	171-174
Cross examination by Mr. Sparks	744	174
	746-762	174-185
	766-767	185-186
	775-779	186-188
	917-919	188-190
Redirect examination by Mr. McAllister	934	190
	942-943	190
Walters, Mason G. (recalled)		
Direct examination (resumed) by Mr. McAllister	993-1001	191-196
Cross examination by Mr. Sparks	1001	197
Paris, A. W.		
Direct examination by Mr. McAllister	1002-1004	197-198
	1018-1020	198-200
	1034	200
	1045-1046	200-201
	1048-1049	201-202
	1082-1084	202-203
	1094-1095	204-205
	1103-1105	205-206
	1108-1112	206-209
	1116	209-210
	1119-1121	210-212

	Record Page	Appendix Page
Direct examination (resumed) by Mr. Perdue	1122-1124	213-215
	1131-1134	215-217
	1146-1148	217-218
Cross examination by Mr. Sparks	1157-1183	219-237
	1191-1198	238-243
Walters, Mason G. (recalled)		
Further direct examination by Mr. Purdue	1211	244
	1213-1216	244-246
Markley, Howard		
Direct examination by Mr. Purdue	1217-1220	246-248
	1225	248
	1227-1230	249-250
	1232	250-251
	1269-1274	251-255
	1301-1303	256-257
	1311-1315	257-261
	1341	261
	1344-1345	262
Examination by Mr. Torkelson	1372	262
	1379	262-263
Cross examination by Mr. Sparks	1380-1385	263-267
	1395-1396	267-269
	1425-1427	269-270
	1463-1466	270-273
Redirect examination by Mr. McAllister	1473	273
	1486-1488	273-275
	1541-1542	275-276

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
Redirect examination (resumed) by Mr. McAllister	1545	276
	1555-1556	276-278
Examination by Mr. Torkelson	1562-1564	278-279
Examination by Mr. McAllister	1568-1569	279-280
Recross examination by Mr. Sparks	1569	280
Roth, George C.		
Direct examination by Mr. Joffee	1576-1587	281-288
	1590-1593	288-290
Cross examination by Mr. Sparks	1602-1604	291-292
	1657	292-293
Schumacher, A. H.		
Direct examination by Mr. Joffee	1666-1669	293-295
Stewart, Robert Boyd		
Direct examination by Mr. Purdue	1671	295
	1674	295-296
	1680	296
Walters, Mason G. (resumed)		
Redirect examination by Mr. McAllister	1744-1745	296-298
	1786-1787	298
	1789	298-299

	Record Page	Appendix Page
Rippel, A. M.		
Direct examination by Mr. Purdue	1796-1797	299-300
Markley, Howard (resumed)		
Examination by Mr. McAllister	1867	300
	1869-1870	300-301
	1881-1882	301-302
	1898, 1902	302
	1973, 1975	303
Rippel, A. M. (resumed)		
Direct examination by Mr. McAllister	1977-1982	303-306
	1985-1986	307-308
	1990-1993	308-310
	2014	310-311
	2020-2022	311-312
	2024-2026	313-314
	2030-2032	314-315
	2037-2038	315
	2093-2094	315-316
	2097-2098	317
	2103-2104	317-318
Bunn, George P.		
Direct examination by Mr. McAllister	2107-2108	319-320
	2121-2123	320-322
	2132-2134	322-323
	2136-2137	323-324
	2147-2148	324-326
Cross examination by Mr. Sparks	2157-2160	326-329

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
O'Leary, Henry J.		
Direct examination by Mr. Honeck	2166, 2172	329
	2176	329
	2178	329-330
	2181-2185	330-334
Bunn, George P. (resumed)		
Redirect examination by Mr. McAllister	2221	334
	2256-2261	334-339
Recross examination by Mr. Sparks	2271-2272	339
	2284-2285	339-341
	2309	341
	2355-2358	341-343
	2421-2422	343-344
Stark, C. O. (resumed)		
Examination by Mr. Torkelson	2466	344
	2470-2471	344-345
	2726	345
Beall, K. E.		
Direct examination by Mr. Torkelson	2726-2727	345-346
	2729, 2732	346
Examination by Mr. McAllister	2733-2734	346-347
	2737	347-348
	2742, 2747	348
	2752	348
	2759-2760	349
	2812	349-350

	Record Page	Appendix Page
Bunn, George P. (resumed)		
Direct examination by Mr. Sparks	2813	350
	2819	350
	2923-2926	350-353
	2935	353
	2939-2940	353-354
	2949-2950	354-355
	2999-3000	355
	3049-3052	355-356
	3055-3058	356-359
	3094-3096	359-361
	3109-3111	361-363
	3140-3141	363
	3146-3147	363-364
	3208	364
	3257-3268	364-374

BLEED THROUGH

BLURRED COPY

INDEX

VOLUME II

WITNESSES

	Record Page	Appendix Page
Testimony of:		
Baumel, Jack K.		
Direct examination by Mr. Crenshaw	3502-3504	375-376
	3569-3572	376-379
	3576-3580	379-383
Murray, W. J. Jr.		
Direct examination by Mr. Crenshaw	3591-3612	383-401
	3617-3623	401-405
Examination by Mr. McAllister	3628-3634	405-409
Examination by Mr. Crenshaw	3637-3641	410-413
	3646-3651	414-419
Examination by Mr. Sparks	3656-3671	419-431
	3673-3677	431-435
	3683-3686	435-438
	3687-3692	438-443
	3696-3702	443-448
	3704-3705	448-449
Examination by Mr. Crenshaw	3717-3718	449-450
	3720-3721	450-451
	3723-3724	452-453
Examination by Mr. Sparks	3724-3740	453-465
	3742-3745	466-468
	3747-3759	468-476

	Record Page	Appendix Page
Cross examination by Mr. McAllister	3762-3773	477-485
	3777-3779	485-487
	3781-3782	487-488
	3785-3786	488-490
	3791-3793	490-492
	3798-3800	492-494
	3822-3823	494
	3835-3840	494-498
	3854-3859	498-502
	3861-3869	502-509
	3872-3873	509-510
Baumel, Jack K. (resumed)		
Direct examination by Mr. Crenshaw	3919	510
	3933-3935	510-512
	3939-3941	512-513
	3948-3958	513-519
	3973-3974	519-520
Spurrier, Richard R.		
Direct examination by Mr. Chumbris	4018-4019	521-522
	4021	522
	4051-4066	522-535
	4071	535
	4073-4077	535-539
Cross examination by Mr. Perdue	4078	539
	4085-4086	539-540
	4088-4092	541-543
	4097-4100	544-546
	4103-4106	546-549
	4110-4111	549-550
	4113-4117	550-552

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
	4122-4123	552-553
	4125-4127	553-555
	4129-4130	555-556
	4132-4134	556-557
Baumel, Jack K. (resumed)	4144	557
Cross examination by Mr. McAllister	4178-4192	558-570
	4228-4234	570-575
	4241-4242	575-576
	4244-4256	576-587
	4260-4264	587-591
	4277	591
	4286	591-592
Smiley, T. E.		
Direct examination by Mr. Sparks	4314	592
	4331-4341	592-602
Capshaw, Elmer		
Direct examination by Mr. Green	4484-4487	602-604
	4518-4520	604-605
	4524-4526	605-606
	4529-4530	606-607
Jones, Ray C.		
Direct examination by Mr. Green	4531-4533	607-609
	4535-4537	609-611
	4539-4540	611-612

	Record Page	Appendix Page
Capshaw, Elmer (resumed)		
Cross examination by Mr. McAllister	4676	612
	4712-4714	612-614
	4716-4718	614-615
	4720	615-616
	4723-4724	616-617
Jones, Ray C. (resumed)		
Cross examination by Mr. McAllister	4763	617
	4765-4766	618-619
	4770-4771	619
Walters, Mason (resumed)		
Direct examination by Mr. Perdue	4776	620
	4780-4782	620-621
Bunn, George P. (resumed)		
Cross examination by Mr. McAllister	4783	621
	4805-4808	621-624
	4872	624
	4874-4876	624-625
	4909	626
	4911-4914	626-627
	4936-4937	627-628
	4943-4944	628-629
	5022-5023	629
Examination by Mr. Joffee	5078-5080	630-631
	5082-5083	631-632
	5085	632
	5097-5098	632-634

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
	5115-5116	634-635
	5119-5122	635-637
	5127	638
	5133-5136	638-640
	5211-5214	640-643
Redirect examination by		
Mr. Sparks	5268-5284	643-656
	5288-5291	656-660
	5296-5300	660-663
	5311-5323	663-672
	5403-5404	672-673
	5420-5423	673-676
	5445-5447	676-678
	5485-5487	678-679
	5519	679-680
Stockwell, B. P.		
Direct examination by		
Mr. McAllister	5528-5529	680
	5534-5546	680-689
Stevens, Harry P.		
Direct examination by		
Mr. McAllister	5546-5547	689
	5550	689-690
	5552	690
	5560-5563	690-692
Van Scoyoc, Melwood W.		
Direct examination by		
Mr. McAllister	5567	693
	5570-5571	693-694
	5583-5587	694-698
	5611-5613	698-699

	Record Page	Appendix Page
Cross examination by Mr. Sparks	5614-5616	699-700
	5623-5625	701-702
	5649-5663	702-715
Stevens, Harry F. (resumed)		
Cross examination by Mr. Sparks	5670-5684	715-725
Van Scoyoc, Melwood W. (resumed)		
Cross examination by Mr. Sparks	5691-5693	725-728
	5697-5698	728-729
	5709-5711	729-731
	5726-5727	731-732
	5730-5733	732-734
	5735-5739	734-738
Redirect examination by Mr. McAllister	5741	738-730
	5746-4747	739-740
	5756-5760	740-743
	5773-5776	743-747
	5788-5789	747
	5795-5799	747-751

BLEED THROUGH

BLURRED COPY

VOLUME II JOINT APPENDIX

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 11247

STATE OF WISCONSIN AND PUBLIC SERVICE COMMISSION OF WISCONSIN, Petitioners

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

No. 11241

CITY OF DETROIT, MICHIGAN, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

No. 11242

CITY OF KANSAS CITY, MISSOURI, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

No. 11245

CITY OF MILWAUKEE, WISCONSIN, a Municipal Corporation, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

No. 11252

COUNTY OF WAYNE, MICHIGAN, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

Review of An Order of the Federal Power Commission

CONTENTS

Testimony—Record Pages 3502-5799

BLEED THROUGH

BLURRED COPY

[3502]

JACK K. BAUMEL

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Crenshaw

Q. Please state your name. A. Jack K. Baumel.

Q. Where do you live, Mr. Baumel? A. Austin, Texas.

[3503]

Q. What is your business or profession? A. I am a chemical petroleum and natural gas engineer.

Q. For whom do you work or are you employed by anybody? A. I am employed by the Railroad Commission of Texas.

Q. In what capacity? A. As chief engineer.

Q. Before I ask you what the duties of a chief engineer of the Railroad Commission of Texas are, I'll ask you to for the record briefly state for us your background and experience and education in the field of chemical petroleum engineering and so forth. A. I have a B. A. dgree in chemical engineering from the Univerity of Texas and graduate work in petroleum engineering and natural gas from the University of Texas, and I have been employed with the Railroad Commission since graduation, which was in 1937, and I have worked with the Railroad Commission since except for one year, a leave of absence which I was granted to be employed with the Venezuelan Government.

Q. During the 13 or 14 years since you have graduated you have been employed constantly with the exception of one year when you went with the Venezuelan Government as a petroleum engineer and as chief engineer for the Railroad Commission, is that correct? A. That is correct. I became chief engineer in 1945 and director of production of the oil and gas division in 1942.

[3504]

Q. During all that time have you had occasion to study with reference to the rules and regulations and the statutes of Texas regarding the conservation of oil and gas in Texas? A. Yes, sir.

Q. Would you briefly for us relate what are your duties with the Railroad Commission of Texas as chief engineer? A. My duties is to carry out the administrative orders for the Railroad Commission and enforce the rules and regulations of the Commission, pertaining to the conservation of oil and gas.

Q. Are you an advisor to the Commission in any capacity with reference to engineering, petroleum engineering and problems relating to conservation? A. Yes, sir, I am technical advisor to the Railroad Commission.

• • •

[3569]

Q. What is the next step that the driller of the well, owner of the well, in this case we'll say it is Phillips, what is the next step that they take in regard to that well? A. Well, if they want an allowable on that well to share in the market demand for the Texas-Hugoton field, they must

BLEED THROUGH

BLURRED COPY

submit to the Commission a potential test and with that potential test they must file a form 2 or completion report to show that

[3570]

that well is a producer.

Q. Then you ask an engineer of the oil and gas division to study that report and determine whether the potentials of that well, in order to set allowables for the well, is that correct? A. In the Texas-Hugoton field, the allocation formula is based on 100 per cent acreage times deliverability, so we require the operators in reality to submit a deliverability test to show the well capable of producing gas into the line at that pipe line pressure, and in this case we would not give them an allowable until they submitted a potential test and a deliverability test showing the well is capable of producing gas.

Q. After they had complied with that test, then would or would not they go about the job of seeking an allowable for the well? A. As soon as we receive the potential test and deliverability test we then issue, if that well happens to come in during the middle of the month, well, then, issue a supplement to that, giving them an allowable based on the total allocation formula for the field, which, in this case, they'd have to first submit to us a unit plat showing that they can circumscribe 640 acres to that well in order to get full credit for the acreage. If this case if they submitted a plat showing 640 acres to the well and a deliverability test, we would then figure their allowable on 640 times deliverability times the

[3571]

factor which we arrive at based upon market demand for that field.

Q. Does that fit in with your formal procedure with reference to promultating a proration order and allowables with reference to the fields which are depicted here by this Exhibit No. 12? A. That is correct. All connections and wells in this area are subject to that same procedure which I just outlined. Any new well that comes in, they would file a potential test and deliverability test and a plat showing the acreage dedicated to that well. We would then issue a supplement giving them an allowable. The next month we would then put that well on the proration schedule subject to the market demand for the field.

Q. Assuming that is the next month and I believe you stated a while ago that prior to the 20th of each month you have a state-wide hearing, is that correct? A. Under the statute, Section 12 of Article 6008, the Commission has to call a hearing to determine the market demand for gas prior to the 20th of each month, and that market demand is arrived at by each operator submitting nominations to the Commission as to what their demand is from their connections or in the field.

Q. Assuming that is April 1, 1951, I mean you have considered during the month of March 1951 the allowables to be set and prorations to be set in that field.

[3572]

A. That is correct. The Commission after notice and hearing state-wide notice of the hearing, will hear the evidence

BLEED THROUGH

BLURRED COPY

and go into it and to the market demand for gas for the whole state by fields. Then the Commission will issue an order giving every field and its market demand for that field. Our job then is to take that order and reallocate that allowable based on the nominations for each field according to the total allocation formula for the field in question.

Q. I'll ask you if you have not with you the allowable order, based on the nominations for the month of April 1951. Do you have that? A. Yes, sir, that is correct.

BY MR. McALLISTER:

Q. For what field? A. That includes the Panhandle, the Hugoton and the state-wide prorated fields.

BY MR. CRENSHAW:

Q. I'll ask you to look at that document and identify what it is. A. This document has two things together. First is that state-wide order which I spoke of where the Commission after notice and hearing called a state-wide hearing and determined the market demand for gas from each field. Then attached to that order is a proration schedule of each field which order allocates the nominations for market demand.

* * *

[3576]

Q. I believe you have already explained, Mr. Baumel, how the Commission, based upon the nominations for each field, then makes a state-wide allowable for all of the fields and then applying the proration allowable formula to each field you have arrived at what each well will be allowed to produce in that particular field, is that correct? A. That

is correct. We are bound by the statute to distribute the allowable to all wells in the field based on the allocation formula whether they have connections or not.

Q. In making that allowable for each particular well, we'll say, as shown here in Exhibit No. 12, state whether or not the Commission is restricted by the laws to do that on a basis which will not discriminate as between the producers in the same field. Is that correct or not? A. That is correct. We have to consider under the statutes the market demand for the field as a whole, not the market demand for each purchaser, and we take and total up the nominations from each purchaser and arrive at the market demand for that field. We then take those nominations and distribute them ratably according to the allocation formula to all wells in the field whether they have connections or not.

Q. Speaking specifically about the nominations in

[3577]

in that regard, I'll ask you to state whether or not that one who makes the nomination will also obtain or receive from the Commission an allowable which is equal to that nomination. A. Well, if he did it would just be a miracle, because it would be impossible for a purchaser to get exactly what he nominates in every day occurrences on the proration when you prorate to distribute the allowable ratably to all wells whether they have connections or not and we must consider the market demand for the field as a whole. The purchaser will in many cases end up with less than what he nominates and in a number of cases he will end up with more than he nominated.

BLEED THROUGH

BLURRED COPY

Q. Is that your experience with the Railroad Commission in setting the allowables for these fields, has that been the picture as you described it there or not? A. I might explain this, that when we first put a field on proration, the only way we can arrive at as to what the actual market demand for the field is would be based on the sworn nominations, but we have experienced over a number of years and based on human nature, that a purchaser will always over nominate so he can get the gas from his own connections. That will hold true for the first month but on the second month we take the actual gas from the field and disregard his nominations for the following month.

[3578]

For example, the total nomination for the field may be three million cubic feet a day. We would fix the allowable for the first month at three million cubic feet for the field and distribute it ratably for all wells whether they have connections or not based on the allocation formula. When we receive the producer's reports or 3-266, we check the production figures against the allowable schedule and if we find that instead of taking three million from the field they actually took two million five hundred thousand cubic feet, then the following month when we fix our proration schedules and the nominations are still three million we automatically reduce them to two million five hundred thousand because we feel that is the actual demand for the field and we distribute the actual take ratably to all wells whether they have connections or not.

Q. That is exercising your jurisdiction and control over

the wells and under our illustration in carrying it forward under this exhibit, that is the exact procedure that applies to the wells shown in the exhibit, is that true? A. The same procedure applies to any field which is under proration in the State of Texas.

Q. In other words, to be more specific, if Phillips has made nomination for its take from this field of the three hundred million as you illustrated a while ago, and it developed on the record that the actual take one month was only two

[3579]

million five hundred thousand, then the following month you would allocate to Phillips, two million five hundred thousand, is that correct? A. We wouldn't exactly allocate to Phillips. We would allocate that to the whole field and that field may have more than one purchaser and it may have more than one number of connections, we would distribute the take from that field, which under the example of two million five hundred thousand cubic feet, it would be on all wells whether they have connections or not, and if Phillips was one of the purchasers and they nominated half that amount and they couldn't get gas they would have to lay lines to those unconnected wells to meet their market demand.

[3580]

Q. All right. Having made your allowable—let's see, I believe Exhibit 134-A is actually the proration allowables that you promulgated for that particular field shown on Exhibit 12, is that right? A. That is correct. That is the

BLEED THROUGH

BLURRED COPY

allowable schedule that was issued effective April 1, 1951, which shows the monthly nominations, the amount of production, the acres and deliverability for the field and the net allocation monthly, and the number of connected allowables in the field. It shows that there are three purchasers in the field.

* * *

[3591]

W. J. MURRAY, JR.

was called as a witness, and having been first duy sworn, was examined and testified as follows:

Direct Examination by Mr. Crenshaw

Q. Please state your name. A. W. J. Murray, Jr.

Q. Where do you live, Mr. Muray? A. Austin, Texas.

Q. What is your business or profession or will you state whether or not you hold an office in the State of Texas? A. My profession is engineering, and I currently hold the office of Railroad Commissioner of Texas. I am one of the three Railroad Commissioners.

Q. I believe it has already been explained yesterday by General Thompson that is an elective office. That is right, isn't it? A. Yes.

Q. And you were duly elected at the last time required for

[3592]

your office? A. I was elected. Last summer I succeeded in acquiring the Democratic nomination. I made the mis-

take of saying I was elected last summer. I was elected last November.

Q. So this is the first year of your new six year term? A. That is correct.

Q. Had you been elected prior to that? A. I came on by appointment.

Q. When was that? A. In January of '47. I took the late Governor Buford Jester's place on the Railroad Commission. When he became Governor he vacated his position on the Railroad Commission and I served in his stead. I served under appointment for two year and ran for office for the last two years of his unexpired term and then last summer ran for a full six year term. I served four years in January of this year, beginning on the six year term.

Q. You have stated that you are an engineer by profession. I'll ask you to state briefly your educational background and experience as an engineer? A. I hold a degree as a B. S. and M. S. in petroleum engineering. I have lived all my life in the oil fields, my father being a rig contractor, and since receiving my educational training, I have worked in the oil fields, serving as consulting engineer and in times past have been employed by the Texas

[3593]

Railroad Commission in their oil and gas divisions as an engineer. Does that suffice?

Q. Yes, sir. Would you briefly state for us the duties of your office as Railroad Commissioner, I mean briefly, as you understand your own duties in connection with that office? A. The Railroad Commission regulates all public

BLEED THROUGH

BLURRED COPY

transportation in Texas. To outline those duties would be difficult briefly. I think I can just let it suffice to say we regulate all public transportation. We regulate, through our gas utilities division, intrastate movement and domestic sales of natural gas. We regulate the L.P.G. liquefied petroleum gas division or butane division, and we regulate oil and gas, that originally being a correlative minor subdivision of the functions of the Commission, due to the growth of oil and gas industry in Texas it is now our major field of activity.

Q. With specific reference to the regulation of the oil and gas industry in Texas, I'll ask you to briefly state, generally, what phases of the oil and gas industry in Texas do you regulate. I'll ask specifically you regulate— A. (Interrupting.) I'd say all, I guess.

Q. As it is produced within the boundaries of Texas, is that correct? A. Yes. Our primary function is conservation. That is the greatest duty of the Railroad Commission in its regulation of the oil and gas industry. There are many other duties but

[3594]

that always comes first and foremost. We regulate the drilling of wells, prescribe many safety and conservation measures relative to drilling. We regulate the spacing of wells and when wells are dry we regulate their abandonment so as to cause no contamination of water horizons or oil or gas bearing horizons. Producing wells, we regulate the method of completion, we regulate the method of production, so that will be produced efficiently and we prorate

or allocate the quantity of oil or gas which each well is permitted to produce. That first duty in proration is to fix allowables, as we call them, at rates which will not cause physical waste, and then since prevention of physical waste necessitates proration, restriction of the rate of production from each well, then we must distribute allowables among all of the wells in a field in an equitable fashion so as to preserve correlative property rights. In brief, the primary function is conservation. Conservation necessarily imposes upon the privacy of the individual to produce his well at the rate he would like. Therefore, when we restrict rates of production, distribute allowables, we take on the secondary function of preserving equity and protecting correlative rights.

Q. One of the primary bases, is it not, in a conservation program is always the matter of preventing waste, is that correct? A. Yes.

Q. Just state briefly, if you will, your idea of what

[3595]

it means to prevent waste, or in order to do that you might give us an example of what you mean by preventing waste in a gas field or with reference to a gas well. Is that too general for you? A. No. I'm just taking three breaths to try and be sure I do state briefly. That is my field of specialty. I was trained as a petroleum engineer. I have specialized in the field of oil and gas conservation. I was chairman of the industry committee, I was not then connected with the Railroad Commission, that made a report on the wasteage of gas in Texas, and that, so Governor

BLEED THROUGH

BLURRED COPY

Jester stated, was the reason for appointing me on the Railroad Commission, and I am so steeped in the subject that the temptation generally exists to dwell longer on conservation than I should. Now, you have asked for a brief example of how to prevent waste of gas?

Q. Before you start I don't mean to confine you in any way you'd like to explain. If you have anything further to say don't let my statement as to the briefness interfere with your statement. Just go right ahead in answer to that question. A. Well, I am so steeped in the subject of conservation, I think it is so tremendously important to the welfare of the state and of the nation, I think every citizen of Texas and every citizen of the United States has a vital interest in what we do in oil and gas conservation in Texas, and, therefore, it is pretty advisable to limit me and cut me off, that I don't

[3596]

get strung out here. Let me see if I can satisfy your question and do a brief job here. There have been two fields of wasteage of gas, first, from gas wells and secondly of casing-head gas. Now, I presume it is not necessary for me to define a gas well and what casing-head gas is. I guess that is in the record or everyone knows that.

Q. In that connection, in view of an objection that was made this morning with reference to an exhibit pertaining to oil production, I would, if you don't mind, like for you to explain what the casing-head gas is and how it is produced. A. Casing-head gas is gas that is produced in connection with the production of oil. It is impossible to

produce oil without producing gas. We have a statutory definition in Texas of what an oil well is and what a gas well is. If the gas-oil ratio is less than one hundred thousand cubic feet of gas per barrel of oil, then by statutes it is an oil well. If the well produces more than one hundred thousand cubic feet of gas per barrel of oil, then by statutes it is a gas well.

With that background, I think I can quickly discuss the conservation problems. In times past there has been a great deal of wasteage of natural gas and when I saw natural gas I am speaking of gas that is produced from a statutory gas well. We struggled to minimize and finally to eliminate the wasteage of natural gas. We now have a statute in Texas prohibiting the flaring of natural gas. One time in the past there was

[3597]

flared from the Panhandle field alone as much as a billion cubic feet of natural gas a day. That was a teriffic waste. It wasn't willful. There were many causes of it I could explain, but I think it unnecessary. But gradually we have substantially eliminated the wasteage of gas from gas wells.

Then there existed the second problem of conserving this by-product gas that was produced with oil. For a long time it was argued that that wasn't waste, that since it was impossible to produce oil without producing gas and since oil wells were scattered all over the state frequently remote from markets, that you couldn't regard as waste the flaring of casing-head gas, because there was no way of getting the oil which we had to have without getting

BLEED THROUGH

BLURRED COPY

the gas, too. But we felt that that gas was of great instrinsic value, too. Casing-head gas, chemically, physically, is no different from natural gas produced from a statutory gas well, and we felt it ought to be used too, that it meant too much to the future of our state and to the welfare of the nation to let that gas be wasted, and so we have long struggled with the problem of getting that casing-head gas marketed.

Briefly, the difficulty lies in the fact that every oil well produces gas. Usually in small quantities. So to market that gas you've got to have an extensive gathering system going to all of these oil wells. You have to have separation equipment separating the oil from the gas and then you have to

[3598]

gather that gas, you have to process it, compress it and deliver it to markets.

A gas well can be closed in until its gas is needed and then when there is a period of peak demand for gas, you open up the gas well and produce whatever gas is needed for the market. When the demand falls off, you restrict the well or close it in completely. The problem of casing-head gas, however, is that that gas is produced when you produce oil, and we need oil constantly every day in the year, so that gas must be marketed on a 24-hour basis 30 days a month every day in the year, and it has been an extremely complex difficulty, expensive problem to solve, and I am most happy to say that we have made amazing progress in the utilizing casing-head gas in Texas.

Today we are utilizing approximately three billion cubic feet a day of casing-head gas. In times past, nearly all of that casing-head gas was flared, because it was produced, as I said, so far removed from markets, had to be produced along with the oil. That wasn't as short as I intended it to be, but that, then, in general is the problem of gas conservation. Don't flare any gas from a gas well. Drill and complete and produce them in such fashion as to do no harm to the reservoir and because no waste, and, secondly, market the casing-head gas, give it preference, take casing-head gas first, because you can leave gas well gas in the ground and get it later, but if you don't utilize all of the casing-head gas that is produced

[3599]

today it is flared and is gone forever, and so then you begin to—here is a fellow who owns a gas well, he has a market for his gas and he would like to produce it currently, but if we let him fill that market, we may have to turn around and flare casing-head gas, so we have to hold him back and let the casing-head gas have preference in going to the market.

That by no means covers the field, but possibly—I am sorry I haven't been more brief and more responsive to your question, but that, I do believe, gives a proper picture of gas conservation.

[3600]

Q. With special reference to casing-head gas, your explanation there has been the reason why they say the first call is casing-head gas? A. Yes.

BLEED THROUGH

BLURRED COPY

Q. Those are the reasons for that? A. That is right. We recognize that there is a serious question of equity. A fellow has an investment in gas wells and wants to produce them. Why shouldn't we let him fill his market? We have to infringe considerably upon his freedom there, but if we don't hold back on those gas wells, we are going to have to let this casing-head gas go to the air and be flared, and we feel that the public has too great an interest even though we do have to take drastic steps, coercive steps, possibly, in forcing markets to be shared and forcing them to give preference to the casing-head gas. The alternative is to continue the flaring of billions of feet of casing-head gas while we use up our natural gas reserves. Then when the natural gas is gone and there would be a market for the casing head gas, it is gone, too, because you have to produce that with the oil.

Q. Let's talk for a minute about the production of oil and in the production of oil there is this inevitable production of casing-head gas also. Perhaps we could go down geologically speaking and describe the strata where there is a field in which there is a gas drive. Would you do that for us, briefly, explain what they mean by a gas

[3601]

drive? A. An oil field where there is a gas drive?

Q. Yes. A. Oil is produced from reservoir rocks. There is a common misconception that oil lies in underground lakes or pools, that when you drill a well down to one of these lakes or pools you produce oil from it as you would from a surface tank of water, until it is empty. That isn't

true. It is held in the tight pore spaces of hard reservoir limestone or sandstone. Oil is like water in a spring, it cannot of itself expel itself, you have to have some source of energy to force the oil out of the pore spaces into the bore hole. We therefore classify oil reservoirs according to the source of energy that moves the oil out of the pore space into the bore hole so it may be recovered, and those sources of energy result in these classifications of oil reservoirs. The most efficient source of energy is water under hydrostatic head pressure, so you produce oil, water moves through the pore spaces flushing the oil ahead of it. That is the field known as one with a water drive, the great East Texas field is an example of a water drive field.

Some fields are sealed off along the outer periphery and have no water that can come in, but they may have an overlying gas gap. In other words, the oil and gas are

[3602]

graviationly segregated. The oil being heavy lies in the bottom of the rock. The gas is lighter and lies in what is called a gas cap or dome above the oil, and that type of field is known as a gas drive field. You recover your oil by the expanding energy of the gas pushing downward on the oil. It is like the compressed energy of a spring. If anyone would understand the illustration, it is like getting water out of a seltzer bottle, the compressed gas above forces the oil to flow out.

I might digress to state to the Examiner my appreciation for being privileged to come in out of order in order that I may return, and also explain that I had no oppor-

BLEED THROUGH

BLURRED COPY

tunity to discuss with counsel and so I am not certain that I am completely responsive to the points he wishes to make. Did I answer the question of gas drive?

Q. Yes, you did, and at the same time you mentioned what a water drive field was, too, and that was my other question, the next question. In other words, if you have a water drive field you find the water on the bottom, is that right? A. On the bottom or the edge.

Q. Pushing on the sides or on the bottom? A. That is right.

Q. And the exact opposite of that is true if it is a gas drive, it pushes from the top?

[3603]

A. Gas pushes down.

Q. In the production of the oil to produce the gas—you said that was casing-head gas. How do you regulate the use of casing-head gas? A. Could I generalize a bit more and then be directly responsive to your question?

Possibly by making a few statements I can save time, if it is not out of order.

Q. It is all right. A. There is one other type of drive, what is known as a solution drive. We have water drive fields, we have gas cap fields, extending down and called gas drive, and the other is where you neither have a water drive nor a gas cap. The only energy you have for recovering the oil is gas that is dissolved in the oil. It is like the carbon dioxide in a coke, you punch a hole in the coke and shake it up and punch some of the coke out by the energy of the carbon dioxide in the coke. Unfortunately

you have a lot of fields that that is all you have. The recoveries you get from solution drive oil fields are in the range of fifteen to thirty per cent. The recoveries you can expect from a gas cap drive field are in the range of thirty to fifty per cent, and the recoveries you can expect from a water drive field are in the range of fifty to eighty per cent. Therefore, you see the advantage of having a water drive field. A further complexity exists

[3604]

that many fields have a combination of these, and it is the rate of production that determines which drive is used. If you have a water drive it usually will move in only at a certain rate, and you must produce your oil slowly enough to let the water keep up with it. Otherwise you will change from an efficient water drive field to a much less efficient solution drive field.

So remembering that solution drives you get fifteen to thirty per cent, if you have a water drive and will control the reservoir so as to take advantage of it you can run it up to fifty to eighty per cent. You can see the tremendous advantage. Now, I can answer your question of why do we control casing-head gas production. You see, that casing-head gas frequently is the source of energy that moves the oil into the bore hole, and in addition to that dissolved in the oil it makes it less viscous, more free to move. Oil devoid of all of its dissolved gas becomes viscous, tarry, and you just can't get it out of the reservoir, but if you keep that gas dissolved in it, it is fluid, about the viscosity of water, and you can recover it much more readily.

BLEED THROUGH

BLURRED COPY

So it is important to control the production of casing-head gas from oil reservoir for these reasons: 1, that gas is frequently the principle source of energy that is going to produce the oil and when the gas is gone, no matter how much oil you have left, you are through recovering the oil.

[3605]

That is one reason for controlling it. 2, that gas is you can keep the pressures up and keep it dissolved in the oil, makes the oil much more fluid or more easily recovered. 3, the gas has value itself and so you don't want to waste that gas after it has served its primary function of bringing the oil into the well bore. We still find it of immense intrinsic value and want to conserve it.

We prescribe what is known as gas-oil ratio limitations on all wells and say, now, you can't produce your well with more than a certain gas-oil ratio. That is commonly two thousand to one state-wide, although we recently had a hearing that have nearly changed it to one thousand to one, that is, the state-wide permitted ratio would be one thousand cubic feet of gas per barrel of oil. Wells with high ratios are penalized. They are not given as much allowable oil production as a low ratio efficient well would receive, and that control on gas-oil ratio is one of our biggest functions. We are trying to save that gas in the ground in order to recover more oil and then once the gas is produced we are trying to see that it is marketed.

I might further add, if I am not out of order, because you haven't asked the question,—

Q. (Interrupting.) Go right head. A. To increase oil recoveries we frequently have to supplement natural sources of energy. If you have a solution

[3606]

drive field with a fifteen per cent recovery, why, you see how important it would be to do something to artificially inject energy into that reservoir by pumping some fluid in, to get more oil recovery, and, therefore, frequently we have to order gas returned to the reservoir.

[3607]

Why would I consider that worthy of mention here? Well, we are just on the threshhold of tremendous steps forward in oil conservation, and I think more and more the commission will come to order oil fields produced in that fashion destined to give the greatest ultimate recovery, and we, therefore, will frequently have to order that casing-head gas which is committed to a market, there is nothing wrong with producing that gas and taking it to the market, except that that gas is needed to get the greatest oil recovery. Wherein we do our duty to the nation and to the state of the greatest oil conservation, we are going to have to more and more encroach upon the privileges of a pipe line to take gas from sources that they may have contracted for 20 years. For example, much of West Texas, that casing-head gas is being gathered and sweetened and taken—El Paso Natural is the biggest producer there. We are getting dreadfully low recovery in West Texas. Less than one barrel out of every five is being recovered. The

BLEED THROUGH
BLURRED COPY

two largest oil fields in this hemisphere are currently being developed in West Texas, the Reef Line production and the Sprayberry Sand Production. We are going to get one barrel out of seven or less, and to do something about that as desperately as the nation needs that oil, we are on the threshhold of ordering gas returned and we are going to have to step in and take over a lot of that gas that is committed to other sources, but if we are going to get that oil out, we are going to have to use that

[3608]

gas to pump that gas out. I have deviated from your question, and I recognize I should be more responsive to direct questions, but that gives me a chance—

Q. (Interrupting.) I want to ask one there. A. I believe he wanted to—

BY MR. McALLISTER:

Q. (Interrupting.) When you said El Paso was one of the larger producers, you meant carriers? A. Carriers, excuse me. To my knowledge they don't produce any gas. That was simply a slip of the tongue.

Q. I thought so and I thought you'd rather have it corrected than come back afterwards and correct it on the record. A. I appreciate that very much.

BY MR. CRENSHAW:

Q. In other words, Mr. Murray, based upon your previous testimony there with reference to the positive conservation to prevent waste as you defined it there, you have related, interrelated, the production of casing-head gas so that it shows vividly that it is necessary to supplement

and maintain the pressures and so forth to produce oil, that you must use that casing-head gas in that production and that as time goes on and the pressures decrease within the reservoir, it may become necessary to use casing-head gas, divert it back into the ground in order to produce and maintain those pressures, is that the way I understand you?

[3609]

A. Yes; except I couldn't quite agree with "may". We know it is necessary, it is now becoming necessary to use casing-head gas and in order to discharge our responsibility of getting the greatest oil recovery, we are going to have to issue orders of much wider scope than we would like to do. Our reservoir is a unit, and therefore we have to deprive a lot of individuals of the freedom of enterprise and freedom of initiative we would like them to have in order not to cause great loss of recoverable order, and it is a thing we shudder about, saying to a fellow, how, I want to sell my gas to this interstate pipe line, it is going for a good use, and we have to tell him no you can't do it, this gas has to be pumped back into this oil reservoir. We shudder to do that, but the alternative is to lose five or six barrels of oil for each one recovered under the ground and oil has become too critical to the nation for us to fail to do full duty in requiring these conservation measures.

MR. McALLISTER: Might I ask a question, please.

MR. CRENSHAW: Yes, go ahead, if you desire.

BY MR. McALLISTER:

Q. As I understood your statement, I think Mr. Crenshaw limited it some, you don't propose to wait until there is that loss made effective by reduced pressure in the reser-

BLEED THROUGH

BLURRED COPY

voir, but you propose to do something about it before the loss becomes irretrievable by reduced pressure?

[3610]

A. That is correct, sir. We used to have the thought, the industry generally, that we will go ahead and produce your field by primary methods and then when you got all the oil you can get by primary methods, then if it appears worthwhile we'll go back in and repressure or water flood, we call that secondary recovery, you got all you could primarily—well, you can get a whole lot more. Excuse me, a lot of fields you got down to the point and it wasn't sound to do anything more so you just abandoned them, and those fields where it was wise to have repressuring or water flooding, why, they'd do it, but in every case you could have gotten more oil cheaper if you had done it to start with than to wait until the last. In some cases, you can't do it at the last at all. In other words cases, you can do it fine at the last. But any time you are doing well at the last it is axiomatic you could have done better at the beginning.

Q. Will you explain for the record here just what is that takes place down in the reservoir so far as the viscosity of the oil is concerned where the pressure is reduced under the primary recovery method and which it is impossible later on to rectify by the introduction of gas pressure or what-not. Do you understand the question? A. I believe I do.

Q. I mean a certain amount of that oil that, let's call it, coagulates, for a general term and adheres to the particles

[3611]

of sand and becomes tar like, that is the oil you can never recover? A. We would be challenged if we would say it is lost forever, because you could by pumping gas back in and restoring it to its original pressure, in time it would go back into solution in the oil and the oil viscosity would be reduced.

Q. But you say in time— A. (Interrupting.) Sometimes that would very nearly be geologic time.

Q. That is right. A. So I cannot quite say it is forever lost, but I can say that the process is frequently too slow to be practical for humans to wait on it, and it is generally a lot more expensive, so why not do it right the first time to be sure of it.

Q. But you don't know of any fields where gas has gone back in and they have been able to wait long enough for that oil to return to full solution? A. No, sir. I do want to state that a great deal of good is done by injecting gas into old fields or water into them. I think everybody here is acquainted with what they have done at Bradford, Pennsylvania. They have got even more oil out by water flooding then they ever did by primary methods. I am enthused about those possibilities and want to see if we can't do something like that on every old field. But now that we know

[3612]

better let's try to do the new fields in the beginning, if for no other reason than to save money.

Q. Take the Bradford field you mentioned, that is small compared to the fields you have to deal with in Texas? A. That is right.

BLEED THROUGH

BLURRED COPY

Q. I mean the amount of gas—there are some fields in Texas where it would be impossible to find enough gas hardly to bring them back for repressuring? A. That is true.

* * *

[3617]

Q. Just one more element in connection with the recovery of oil. Is it not a fact that the chemical constituents of different characters of oil are such that in dealing with them in difference reservoirs, those are matters which have to be taken into consideration as well as those matters which you have mentioned? A. Oh, very definitely, sir. Each reservoir is diverent. I have generalized dangerously in giving these general recoveries, because you must study each reservoir. I might point out one additional thing. The newest technique on oil recovery, one of the newest, I should say, is what is called, or I may call, high pressure gas injection. By pumping gas into an oil reservoir to where you raise the pressure. When we repressure an old abandoned field we don't even raise the pressure back to original, we just build up the pressure to fifty, a hundred

[3618]

or two hundred pounds maybe, and in some fields we have what is called pressure maintenance, we pump gas in to keep it up to its original pressure, but the newest idea—it is more than an idea, it has been tested—is to build the pressure up as high as the reservoir rock will stand without parting, and the laboratory research results indicated we can get better than eighty per cent recovery by this high

pressure gas injection on a reservoir that would ordinarily give only fifteen per cent recovery, and it will soon be tried out in West Texas field, this high pressure gas injection.

MR. SPARKS: What field is that?

THE WITNESS: Block 31.

BY MR. McALLISTER.

Q. That is pressure up around twenty-five hundred pounds, something on that order. A. That pressure will vary with the individual reservoir. In general, it is related to depth, and they know they can go up to about a half a pound for a foot of depth. If your reservoir is five thousand feet deep, why, you could go at least to twenty-five hundred pounds and possibly something higher than that. When you get above a pound per foot of depth, you nearly always lift the old burden or part the formation, we don't know exactly what takes place, but instead of the gas going through the pore spaces in the rock, it breaks the rock

[3619]

down and by-passes it.

Q. And so it is lost? A. But that is the most promising new technique, this high pressure gas injection. When you go so very high you dissolve most of the residuals you were talking about, they dissolve in the gas. We have been talking about gas dissolving into oil, and the oil this time dissolves into gas and you get more out of it that way than any other way. The disadvantage, it is expensive. Think of the compressor cost, and it takes a dickens of a lot of gas, we've got to have a lot of gas for that process, but the advantages, think how much additional recovery

BLEED THROUGH

BLURRED COPY

we get and we don't waste any of that gas, it will be available at sometime in the future. We just have to take it away from the pipe lines right now but they are liable to need it more in the future.

Thank all of you for your tolerance of me. I'll try to be a more responsive witness.

[3620]

BY MR. CRENSHAW:

Q. In connection with what you are talking about now, state whether or not it is true that the Commission has issued an order concerning the construction of pilot plants in the Scurry field, in order to inject the gas? A. Yes, we have pilot plants there, both for water injection and gas injection. Possibly for the record, I should explain a pilot plant is a small scale reservoir test, rather than trying it for the whole reservoir you just try it for the small area and see how it is going to work.

Q. Awhile ago you were talking about, you mentioned, the gas-oil ratio, and how that applied to state-wide and particularly to some fields. Will you state whether or not there has been any recent order of the Commission with relationship to that gas-oil ratio, we will say, in the Shafter Lake field. Was it gas-oil or was it water? A. I think I know the facts, but I'm not sure. I may have forgotten something. I think I know what you are driving about. In the Shafter Lake-Devonian field, the Commission has issued an order, effective June 1, requiring them to return all of the gas they produced and all of the water they produced to the reservoir. That is a case like we were talking about. We were getting pityful small recovery, pressures

were just dropping, and so we have ordered that all the gas and all of the water be returned.

[3621]

BY MR. SPARKS:

Q. Is that gas connected with Phillips Fullerton plant, if you know? A. Yes. Is it permissible for me to occasionally be prompted by my engineer to be sure I get accurate facts. I know in the court it might not be all right.

• • •

THE WITNESS: I am confirmed in that. That gas produced in the Shafter Lake field goes to the Phillips Fullerton plant and thence after being processed and sweetened is compressed and delivered to the El Paso Natural Pipe Line moving into

[3622]

interstate commerce.

BY MR. McALLISTER:

But if your order becomes effective, will part of that gas go back in the ground? A. If our order is complied with and sustained if we go to court, it will all go back in the ground, so even though the operators in Shafter Lake may have contracted that gas to Phillips and Phillips in turn has contracted it to El Paso, we think the public interest in getting the most oil recovery supersedes there and we are going to make them put that gas in, we are going to try and make them.

Q. Maybe I shouldn't ask you this question now, but you haven't any reason to believe that the Federal Power Commission doesn't fully agree with your conclusions in

BLEED THROUGH

BLURRED COPY

that regard? A. We surely haven't, because—I'm digressing again.

BY MR. SPARKS:

Q. (Interrupting.) Have you ever inquired with the Federal Power Commission as to whether they agreed with your conclusions in that regard? A. No, we haven't.

Q. Then you don't know whether they agree or disagree, do you, Mr. Murray? A. No; but it would be so much in the public interest and our presumption is that the Federal Power Commission, as is the Railroad Commission, is primarily concerned with the public

[3623]

interest, and we would asume—now, that may be a dangerous assumption and I haven't followed the Federal Power Commission's orders, I'm not as acquainted as I should be with the various statements of policy that have been made, but if in fact it is going to be definitely in the public interest to take the gas and use it in this fashion, it is difficult for me to conceive of our authority, and we feel that that is primarily a field of state authority, to regulate our natural resources so as to get the greatest recovery in turn for the public benefit, it is inconceivable to us that we would be interfered with, but that may be an erroneous assumption.

• • •

[3628]

Examination by Mr. McAllister

Q. Do you have authority by order of the Commission to direct the return of gas to a particular reservoir which

was not produced from that reservoir? His question implies that and I want to get that straight first. I mean could you take all of the gas that is now going into the El Paso line, let's say, and if you needed that total volume coming from, let's say, a half a dozen reservoirs, could you take and order all that gas put back into one reservoir? A. I don't know, and if I could briefly elaborate, I guess all of you realize I am an engineer and not qualified to

[3629]

pass on the law, but I have watched it a bit, but there has been difference of opinion among very able counsel as to the authority of the Railroad Commission. For example, the Railroad Commission issue at one time 17 so-called shut-down orders on fields that were flaring large quantities of casing-head gas, and we told them, now, stop producing oil until you can utilize that gas. Well, all of those orders were attacked in court and counsel, I am certain, have sincerely and ably concluded that we didn't have that authority, and we recognize that it was an important test case and we didn't know whether we had authority or not, and the lower courts granted injunctions against us putting those into effect, but the Supreme Court upheld our authority and seemingly stated that if our facts were good enough, if it was truly in the interest of conservation, ifit were sound and practical, then the implied authority given us by the constitution and the statutes to protect and preserve the states natural gas sources gave us the authority to do that.

Q. When I asked the question I don't have any opinion

BLEED THROUGH

BLURRED COPY

one way or the other, but I do know there is a difference of opinion. A. I don't mean to evade, but frankly we are going to find out. If we have the authority to require an oil field to be shut in, that is pretty drastic. I don't mean to say that it wasn't reasonable that they would rise up and attack that authority. That is a pretty strong measure. You can make lots

[3630]

of arguments about why we shouldn't have that authority. We debated long and worried a lot and waited a good many years before we took that step, but if we had the authority to shut an oil well down that might be producing as little as 300 cubic feet of gas per barrel of oil, with a barrel of oil worth two and a half or more, and you set the price on 300 cubic feet of gas, two cents, three cents, why, it looked to some like the tail was wagging the dog, but we were sustained in that and now everybody is happy about it, because the gas is being utilized, oil is being produced and we are doing it at a reasonable price, we understand, or trust they will.

So if we have that authority, I feel that without any knowledge of law that the courts will sustain us if we are reasonable and careful to get plenty of facts in ordering gas to be returned to a reservoir when we are leaving many, many times as much oil as we get out. It is so much more economically important to get that additional oil than it was to safe that gas, that I feel we can be sustained there. There is one difference. Oil is underground and it is hard to see. Most people not acquainted with the oil

business don't understand it. But gas flaring in the air was something that the newspapers, radio and public opinion and the courts could see and understand, but I believe in time if we pick our case right we will be sustained if we don't be arbitrary and just go out and show them we have the authority and try to cooperate as much as

[3631]

possible. A lot of this will be done—I told you about 17 shut down orders. There many, many fields where we never did issue an order. In fact, as soon as we were sustained in court, we had to threaten—we moved right along. A lot of this will be done without the Commission having to issue an order, and that is the way we like it, but I do believe if there is no other way of getting the gas but to require it from some other field, and if we are clear enough in showing you have to put that gas in to get the oil out, that the courts will sustain our authority to do so, but in honesty I've got to say to you that there is presently no clear definite court decision upholding us in that.

* * *

[3632]

Q. I appreciate that. You are not taking too much time, as far as I am concerned, because it is very helpful. I wanted to ask you one question now. I'm not sure on all my facts, but

[3633]

as I understand it Phillips has little or no production in the Scurry County field, isn't that right? A. They are not as substantial.

BLEED THROUGH

BLURRED COPY

Q. That is what I meant.

If we assume that there is a small volume of gas out of the Scurry field that is now processed in the Fullerton plant or none of it is processed in the Fullerton plant or none of it is processed— A. (Interrupting.) Might I interrupt. I believe it is probably my fault. I talked about two things, Scurry in general. I brought it up to illustrate. The specific question dealt with Shafter Lake, and in the Shafter Lake now we have issued the order I was questioned about requiring the gas produced to be returned to the reservoir, and that gas, now, goes to Phillips plant, and that gas we are going to order taken away from Phillips and pumped back. When we left Austin a few days ago, the statement had come to us—that is an unreasonable order, we are not producing enough gas to do the job. All right, so we'll go out and order gas from outside this reservoir to be added to—and now, there I was partially answering your question. Whether we would be sustained in that order or not I don't know, but if it is absolutely necessary to put that gas back in to get the oil out, and if we have used all the gas locally available, I believe that if we are reasonable enough in requiring gas from outside sources to be brought in and put in, and that was, to the gentleman over here, was to the question he asked me.

[3634]

In Shafter Lake Phillips is a producer, and also is the operator of the Fullerton Gasoline plant that processes the Shafter Lake gas, and Scurry County was unrelated except that it is so darned big I brought it in on my own to us as an illustration.

* * *

[3637]

Examination by Mr. Crenshaw

Q. Going back now to the Shafter Lake order, where you have ordered all of the gas injencted back into the ground, as already stated that has the effect of diverting gas that has already gone, that was going to, markets through Phillips lines and out to California, diverting that gas back into the ground. Now, then, assuming that the Federal Power Commission took jurisdiction of Phillips, and assuming further that they granted to Phillips a certificate of public convenience and necessity and that that certificate was based upon dedicated reserves of gas in that field, and then assume further that the Federal Power Commission would regulate Phillips Petroleum Company to the extent of saying to Phillips, you will take the gas that is produced in that field and dedicate on the basis of your dedication and put it in these pipe lines and supply those people in California, assuming that they made that particular regulation, then—

MR. McALLISTER: (Interrupting,) You mean order.

MR. CRENSHAW: Beg pardon?

MR. McALLISTER: Order, not regulation.

MR. CRENSHAW: Order through an order to Phillips.

BY MR. CRENSHAW:

Q. (Continuing.) —to take the gas based on those dedicated reserves, assuming that they regulated in that

[3638]

particular regard, then I'll ask you to state whether or not you have any opinion, if that happened, it would be

BLEED THROUGH

BLURRED COPY

an interference with your power or with your order which you have promulgated in that field?

MR. McALLISTER: Mr. Examiner, I should object to the question, but I'm not going to do it. I'll merely state that if those conceivable absurd assumptions ever became reality, I'm perfectly willing to admit there is a conflict, but I'm not going to object. I'm perfectly willing to have the witness answer.

PRESIDING EXAMINER: All right, go ahead and answer.

THE WITNESS: Based on those assumptions, there certainly would exist a conflict.

BY MR. CRENSHAW:

Q. All right, sir. I'll ask you to state whether or not the dedicated reserves is based upon the same considerations and factors as Your order with reference to the prevention of waste and conservation program, are they any different?

MR. McALLISTER: I object to that, Mr. Examiner, unless there is a definition of dedicated reserves. I don't know what the term means. It is not defined in the dictionary that I know, and it is not defined in any contract.

PRESIDING EXAMINER: Well, let's see what the witness has to say about it.

MR. McALLISTER: Well, I mean if the witness is going to

[3639]

answer—that is all right, I can have him define dedicated reserves. He is going to define it before he answers the question.

THE WITNESS: I sure can't define dedicated reserves and if counsel confesses he doesn't know what they mean I certainly would have to, my information is far more limited. I am fearful of the term dedicated reserves, even though I confess I don't know what it means, because if it were assumed that dedicating reserves meant that upon these particular specific wells and leases the Federal Power Commission felt they had authority to require the gas needed to supply a given interstate market to be produced from these particular dedicated reserves, then if that is what dedicated reserves means, I fear that there is grave grounds for conflict between the Federal Power Commission's authority and the state authority, and I don't worry so much about conflict between two authorities as I do the detrimental effect upon the public interest.

I can see three bases of conflict. One, I think, Mr Baumel explained this morning. It almost never happens that the gas nominated by the particular company, the amount they indicated they'd like to produce, comes out to be the particular share that they get, from their own wells or their connected wells. It is a very rare coincidence nearly impossible to attain, that they get from their own wells exactly what their market demand is indicated to be So unless we have a freedom

[3640]

to make them look to the field and the state as a whole for their gas, not expect to get it from any particular connected wells, then we haven't got the power to prevent waste and to prevent inequities, to protect correlative

BLEED THROUGH
BLURRED COPY

rights. That is number one. Mr. Baumel was discussing that this morning.

Number two is a matter that has also been discussed. I believe General Thompson first mentioned it. If we are going to utilize this casing-head gas we've got to have the authority at times to shove it in ahead of gas that may be dedicated from gas wells. Otherwise it is going to be blown to the air and none of us will have that gas to use, and so if the Federal Power Commission would say to company A which was definitely and primarily in the interstate transportation, business of transporting gas in interstate, say, look you have dedicated material gas reserves to us, don't you take any of that casing-head gas, you've got to produce from your dedicated reserves, or if we told them you can't produce from these dedicated reserves, you've got to hunt up in the open market your share of the casing-head gas, the Federal Power Commission would say, they no, they have these reserves dedicated, they have produced from them, and the third conflict I see would lie in the field illustrated by the Shafter Lake case, where I guess the Shafter Lake gas is dedicated and there is contracts to Phillips and Phillips in turn to El Paso, and we say, no, you can't produce that gas to interstate markets, you've got to pump it back in

[3641]

the ground and here comes Level Land and Slaughter where that gas is dedicated to El Paso Natural and we say you can't produce that gas to the pipe line, you've got to put it back in the ground. There is a third possibility of conflict.

* * *

[3646]

A. To come back to the common purchaser case, we have one currently going on on a particular specific issue but it might relate to our general authority, but in general we consider this common purchaser Act as an obligation aimed primarily at the purchaser. The fellow has certain legal recourse against him without ever invoking the Commission. They can be sued under that Act without bringing us in and ordinarily we don't come in, it is relatively rare, but occasionally we have to come in and tell pipe lines to take from everybody. Of course, we pretty well handle that by a uniform system of allowables. One thing more on the illustration. You see, there is a relatively uniform posted price for oil. It varies in different areas, but always within a given field the price is the same and within a given area all of the same quality is the same price. The Commission doesn't go into the price of oil, and it is not for us to say whether it should be "X" dollars or "3X" dollars per barrel but the uniformity of the prevailing price enables us to avoid a lot of conflict there. One company doesn't come in and have a contract to buy oil from particular leases at half the price that somebody else is selling the oil for. So it makes it so doggoned much easier to swap around, to interconnect. One pipe line can deliver oil to another and it is all the same priced oil so it is just gathering

[3647]

charges involved, they swap it back and forth and it takes an awful lot of swapping to see that all of this intricate system of pipe lines and all of the fluctuations of demands

BLEED THROUGH

BLURRED COPY

up and down, we never do look to see who has the need for so much oil, we don't do that at all, we add up the total need for the state and divide it among the fields in the state, and Humble may need twice as much oil as they are connected to, they may come in and say we have war contracts, you let our field supply, they have done it, but they didn't get anywhere.

I have diverted, but I think it illustrates the situation that we are approaching with regard to gas. The time is going to come when we are—we are already doing it partially, but we don't do it uniformly over the state. The time is going to come when we will look to the total demand for the entire state and we'll throw in this casing-head gas first just like we throw in natural gasoline first in computing the demand for oil, because that natural gasoline has to be produced, so we'll throw in this casing-head gas that is to be marketed first and then we'll put on top of that or subtract that from the total demand and what is left we'll distribute to all the gas fields in the state on some equitable basis.

That may mean that an interstate pipe line with dedicated reserves, whatever that means, can't get near the gas they need. They've got to get out in the open market and hustle for it, and if they wouldn't pay the prevailing price for that gas, they

[3648]

might not get any, we don't say it ought to be this price or that price, but if the pipe line doesn't pay, it doesn't get any gas just like the company doesn't get oil now.

BY MR. CRENSHAW:

Q. What about the situation— A. (Interrupting.) Did I make that point clear? I appreciate the tolerance here because I am going afield from what I should, I guess, but there in is our concern. We respect completely the perogatives of the Federal Power Commission to regulate the interstate movement of gas, just as conceivably there could be a federal authority which would regulate the interstate movement of oil, but we feel it inherently must remain within our authority and responsibility to say where the gas is going to be produced and in what quantities and not to have to consider, well, is this oil dedicated to Humble to go to Standard New Jersey or is this gas dedicated to Phillips to go to a such and such interstate pipe line. We can't take that into consideration or we'd never get it done fairly. That is our conception of responsibility, to look after correlative rights and to say where it is going to be produced and while we don't try to fix the price, we feel that natural economic factors are the best way of working out price and if that price would only get to be uniform, whether it is high or low, that is not for us to say, but if it would be uniform for the same gas in the same area, then this matter

[3649]

of exchanges wouldn't be nearly so difficult. That is where we run into a lot of static where the company says, now, give us more share of the market, we don't want to connect our neighbors, you can't make us, but when it boils down to it they may have got even a contract at a low price and they want to take a lot of gas from there. We don't

BLEED THROUGH

BLURRED COPY

care. Well, we care, but we don't go into what the price is going to be. This difference in price makes it so hard to make the exchanges. Some of the companies have seasonal fluctuations and they have to swap back and forth if we are to work this thing out.

BY MR. McALLISTER:

Q. This price you mentioned applies to interstate movement as well as intrastate movement? A. That is right, yes, sir. You have allowed me a great deal of latitude here. Therein would be our concern, and presumably would be asked why are we concerned. It is none of our business but if anybody asks us our opinion, we don't take issue at all with regulating this gas interstate. We feel like we have to run where it is going to be produced and the matter of dedicating reserves could be an area of very serious conflict.

We have had one terriffc difficulty in getting this casing head gas utilized.

Q. We've had an awful time in the Federal Power Commission as Mr. Baumel well knows—surveys have been made to find a means to get it into interstate pipe lines.

[3650]

A. Our companies don't want to put it in interstate pipe lines.

Q. They don't want to put it anywhere. A. That is one of the greatest barriers, I don't mean to intimate whether it is justly one or not, but one of the greatest obstacles we have had to the conservation of gas. When we have some oil that needs to be moved we don't think whether

it is to Phillips or Shell or Humble or a little independent that is going to truck it, we don't give a darn. It is an allowable and the producer doesn't care and we just look to whose the nearest to him to get him to go over and make the connection, but when we get to the matter of gas we find there is five million feet of casing-head gas being flared and we want to make a market. We find there is an interstate pipe line running by there and we ask them to put it in the interstate pipe line, well, the interstate line has commitments to certain areas and the companies wouldn't sell, they want to get it over here to somebody that is intrastate, so they won't be subject to the control of the Federal Power Commission.

There is our concern. We are not concerned at all about the complete regulation of gas that moves interstate, but we do feel it is the perogative of the Commission that we've got to have the complete authority to regulate the production in order to discharge our first responsbility of conservation, and our second responsibility of preventing inequities.

[3651]

Q. Then it will help to solve this problem if they are all subject to our jurisdiction in some respect and they know that, and you order them to sell it, why, to the pipe line, if they produce it, they must sell it, isn't that right? A. If they produce it—well, they don't have to sell it, they have to utilize it.

Q. They have to utilize it, that is right. A. To go back to my illustration of oil, if, say, you had authority over interstate oil pipe lines, we wouldn't worry about that,

BLEED THROUGH

BLURRED COPY

but we'd think that the fellow who produced oil, the act of production, would be completely out of your sphere. We'd regulate production—

Q. (Interrupting.) I agree with you on that. A. We'd say this field is producing wasteage. You've got to shut it down completely. We'd feel that was out of your province. Then such oil that was permitted to be produced by us, wherever it was produced, if it moved interstate in the pipe line, from the time it got in the pipe line I'd consider it under the jurisdiction of this federal agency. I don't see where there would be any conflict.

• • •

[3656]

Examination by Mr. Sparks

• • •

[3657]

Q. (Interrupting.) Let me read you, Mr. Murray, just one sentence out of the Natural Gas Act. That is Section 7 (b):

> "No natural gas company shall abandon all or any portion of its facilities subject to the jurisdiction of the Commission or any service rendered by means of such facilities without the permission and approval of the Commission first had and obtained after due hearing and the finding by the Commission that the available supply of natural gas is depleted to the extent that the continuance of the service is unwarranted or that the present or future public convenience or necessity permit such abandonment."

I'll leave this in front of you here so you can see it. Let's just assume that Phillips Petroleum Company is held to be such a natural gas company and assume that the facilities

[3658]

of Phillips Petroleum Company are held to be facilities subject to the jurisdiction of the Federal Power Commission, and we'll assume in connection with your Shafter's Lake situation that you order Phillips Petroleum Company and the producers to return that residue gas to the reservoir, which Phillips has in the meantime been selling to El Paso. If, under that statute, Phillips Petroleum Company is a natural gas company and if it ceases to sell and deliver that residue gas to El Paso Natural Gas Company and that the Federal Power Commission construes that to be abandonment of service to that extent, then the only basis on which Phillips Petroleum Company could obey the order of the Railroad Commission would be by securing the consent of the Federal Power Commission, isn't that right, irrespective of what Phillips Petroleum Company's contract with El Paso may state? A. It would seemingly follow to me. We are getting some letters from some interstate pipe lines saying they can't comply with certain—or that was the interpretation we made of the letters—I trust we must have misread it. They were saying they wouldn't comply with what we were telling them to do relative to production because they were under the jurisdiction of the Federal Power Commission. We replied back that possibly they couldn't but they couldn't keep on producing those wells.

BLEED THROUGH

BLURRED COPY

[3659]

MR. McALLISTER: When you get some of those letters, would you be good enough to send them to the Federal Power Commission?

THE WITNESS: I think I haven't myself read the letters, and so I don't mean to be under oath testifying to them, but I think we'll get some of the copies of the letters up here.

MR. McALLISTER: I'd appreciate seeing them, because you know there are some times some people who will assume a condition feeling that if they can avoid compliance by their construction of what they would like to think for a particular purpose, why, they don't hesitate to use it, but when the two agencies get together you can see through their device and it doesn't avail them a whole lot.

THE WITNESS: We imagine that that situation would exist here.

MR. McALLISTER: Sure.

THE WITNESS: And I make no issue of the letters. They will be brought up here, but in answer to your question, if that were true, they had to go get permission from the Federal Power Commission before they could comply with our orders—

BY MR. SPARKS:

Q. (Interrupting.) Before we could desist from and change or reduce, abandon, the service of the deliveries of gas that had theretofore been made, then if they had to

[3660]

get such authority from the Federal Power Commission, that would conflict with your order, wouldn't it? A. Yes.

Q. And the only two grounds on which you can get that authority from the Federal Power Commission are, one, the completion and supply, which, of course, in this instance doesn't exist, and the other one, I think, has to do with public convenience and necessity, which would be a matter lying within the jurisdiction, of course, of the Federal Power Commission.

MR. McALLISTER: They used to say the Devil can quote the Bible to his own purpose. You can assume facts here that make an answer obvious when there is a particular end sought.

The assumptions which underly the answer which Mr. Murray made, which is a correct answer on those assumptions, he couldn't reach any other conclusion, but the whole vice lies in the assumptions and we'll take care of that some other place.

I agree with the answer. If I were on the stand, I'd have to answer the question just like Mr. Murray did, because the assumptions are so violent they are entirely removed from reality.

* * *

[3661]

THE WITNESS: Of course, I am at a loss here. I would assume that many of these presumed areas of conflict do not exist, just like the letter we got. Now, I imagine we'll get together and we'll find that they are in no wise con-

BLEED THROUGH

BLURRED COPY

strained from complying with our requirements because it purely relates to the production and assignment of allowables and maybe they don't want to do it, we are accustomed to that device there, and we think they just say some other authority says they can't. So if the conflict lies simply on a basis of misunderstanding and misinterpretation, the question comes back, why are we worried about this.

The things that we in the Texas Commission haven't been able to understand is why the Federal Power Commission would care to assume jurisdiction over Phillips which to us is primarily in the field of production and gathering and processing gas, but it is all right in Texas and we've got to keep very close control over them in order to force compliance with conservation and correlative rights, so therein I guess that is what the whole suit is about here, whether they are or not, but there is the thing we can't understand, why you'd want them.

[3662]

MR. McALLISTER: Well, there is just this point about it, if under the law laid down by Congress our Commission is charged with an obligation to do certain things, you wouldn't expect us to avoid that obligation, would you?

THE WITNESS: No.

MR. McALLISTER: Let's make a violent assumption. If I didn't agree with the law, if I was employed to enforce the law, why, you would assume that I'd do my duty as I saw it under that law which I was obligated to enforce?

lated, but if you just had one bakery and you couldn't bring any bread in from outside, you had a monopoly, and therefore the public interest, since there existed a monopoly, demanded the price of bread be regulated, that wouldn't mean you'd have to go out and regulate what the farmer got for his wheat, because it went into making bread.

We don't quarrel at all with the regulation of the earnings of this interstate pipe line, because up there in Wisconsin I guess you don't have a whole lot of choice of who you buy your gas from, and so you can regulate what that pipe line earns, but I'll be doggoned if I don't feel that down here where the gas is produced it ought to be at a fair market price, prevailing price, not go into what it costs to find the gas or anything else. If you were buying Texas oil, you don't expect, and you do consume a lot of heating oil in Texas, but I never heard it argued that you had a right or asked a federal agency to come down here and regulate the price of fuel oil.

BY MR. TULANE:

Q. That is true, Mr. Murray, but there are various oil companies you can buy from. When we buy gas we buy from one source, one pipe line. The State of Wisconsin has special legislation to allow you people to come into

[3666]

our state and now the price of gas has been raised about three times since the initial contract was made. We have no one else to turn to. A. Isn't nearly everything you live with or eat raised a whole lot? We pay too much for our meat and too much for our clothes.

BLEED THROUGH

BLURRED COPY

Q. It is true that there is inflation, but isn't it a theory of law that is followed in even the most conservative society that when anybody has a monopoly they must be subject to government regulation? A. I wouldn't quarrel with that at all, but Phillips doesn't have a monopoly on the gas.

Q. They have a monopoly on the gas we are getting. A. You are perfectly free. You can't look to one particular well or field for gas. If you are going to get gas from Texas, we'll do our best to see you get it and we want you to have the cheapest gas through the years as possible, but you've got to look to the fields of Texas for your gas, and it has to be interconnected enough to where we say, no, you don't take any gas from Phillips, we've got some casing-head gas you've got to take. Therefore, you ought to pay a prevailing price for gas down here, whatever that is, just like if somebody had a monopoly on the distribution of fuel oil in your state, you wouldn't control the price of oil down here, but you wouldn't expect him to

[3667]

come down here and pay vastly different, three times, the prevailing price.

All you'd do is expect him to pay the posted price for his fuel oil. Then you could regulate his trucks or pipe lines to get it up there.

Q. What about the prevailing price of that gas before you put the pipe line in? A. Your point is it ought to be frozen?

Q. No, we want to buy your gas, we want to pay a fair price, but we feel you have a monopoly and when

you have a monopoly, your gas— A. (Interrupting.) Excuse me, you say "you". Do you mean the State of Texas or Phillips—

Q. (Interrupting.) I am referring to the State of Texas, not you personally. That gas would have little value unless they had the States of Wisconsin and Michigan and possibly Missouri for a market. What would the prevailing price be if you didn't have those northern states for a market? There is no such thing as a prevailing price aside from that market. A. What we need for the best interest of Texas to do with that gas is to use it here. We are sacrificing our industrial future in order to supply you with gas. I have raised my voice in protest, I have been criticized, because I do know that the future of Texas depends on keeping

[3668]

the gas and using it as a fuel, it is the only fuel we have. When our gas is gone, we're through, you can go somewhere else for coal or something else, we're washed out, but more importantly as a raw material gas is too valuable as a chemical raw material to ever even be burned, but still we say—no, I say, don't try to stop it from going up to Wisconsin, don't stop it from going anywhere, just let these things work out under the economic laws and free competition.

If an industry will come down here in Texas and pay more for that gas than you all are willing to pay, then it ought to be free to buy the gas and use it down here. Such an industry would give us jobs and buying power, many things, we know, but we have never tried to cut them off

BLEED THROUGH

BLURRED COPY

from that. I'd better say I haven't, because there are some who say it ought to be stopped.

We could argue about the value of gas. What are you going to set as a fair value for gas? Compare it on Btu with oil or coal. You, of course, know how it stands that way, but I can make an argument that you can make nylon hose, fertilizer, rayon, explosive, rubber, out of gas, that it has a whole lot more value than an equal pound of coal or heating oil, but to me the thing has just got to work itself out under the free laws of supply and demand.

If you are going to come down here and freeze a low

[3669]

price, then that would work to your temporary advantage. I am saying you now are representing the consumers up there, but pretty soon—that is the one thing we ran into, the courts nearly knocked our orders out on, this flared gas, because we were ordering them to do something that they could show had to be done at a loss, and by the rise in price that has taken place in the last few years, it has made it possible for us to get this billions of feet of casing-head gas utilized.

You say your consumers are paying the bill. What is a few cents a thousand when we market that gas down here—I don't know what you pay, but a few cents a thousand isn't a very big percentage of your retail price up there. The cost of transporting it and all is so much bigger than three cents, or five cents or ten cents a thousand, and yet it means a difference down here, whether we can afford to save it and whether we can afford to drill for it and

develop it. What are you going to do if we can't afford to keep on developing our gas? You'll have to double your price in order to amortize your pipe line over a short period of time and then you are out of gas.

I am representing the Railroad Commission and we are intervening in this case, but we don't stand in Phillips' shoes here and we don't expect them to accept everything we say. Heck, we have a lot of controversy with Phillips down

[3670]

here. Our duty is to the consumer. There are a devil of a lot more consumers in Texas than producers, but our duty is to see they have a supply of gas over the years, and we think we are looking after the interest of consumers in Wisconsin just as much as we are in Texas.

Q. Let me interject this. We want to buy your gas. We want to pay a fair price for it, but we don't think you are justified in assuming the Federal Power Commission will not give you a fair price and we don't think we should be subject to the arbitrary whim of some company not even subject to your commission, as to the price at which it sells. A. You burn our gasoline up there, don't you?

Q. Yes. A. And our heating oil?

Q. Yes. A. Do you think the federal authority ought to come down here and regulate the price of crude oil?

Q. As long as there are two companies competing with each other, no. A. There is a lot of competition among various gas companies for gas and there is competition between gas and all other fields. That is the point I have been trying to make, that you can't look to any one source for

BLEED THROUGH

BLURRED COPY

gas, no more than Humble, who had commitments to sell to Standard of New Jersey, could look to a certain Texas oil field; they

[3671]

had to look to the state as a whole, and we'll endeavor to produce the gas you need from the state as a whole, and we hope it will be a fair and reasonable price, but if one company has to charge too much, you have to be set up where you can get it anywhere, take it where you can get it the cheapest. We have so far taken a stand against our state having authority to fix a minimum price on gas.

We have definitely admitted that dreadful waste is taking place; a billion feet a day alone in the Panhandle Field being flared. Why? Because the price wasn't enough to cause it to be utilized. All this casing-head gas, billions and trillions of feet through the years that has been flared, but we said in time the intrinsic value of gas will be recognized and we'll fight it today, and as soon as the price rises to a reasonable economic level, then it will be possible for us to conserve the gas.

We have a bill in our legislature wherein we may be given authority to set a minimu mprice. We don't want that. We are, I guess, out of the times. We don't want to control the minimum price, we don't want other prices fixed, we think the consumer profits most by having free competitive system. I may be the last guy to hold on to that philosophy, I don't know.

* * *

[3673]

THE WITNESS: I think I can briefly give a better

answer to the gentleman from Wisconsin than I replied a while ago. The Texas Railroad Commission has a responsibility of regulating the domestic price of gas. Now, there is a certain field overlapping the federal commission, if it is

[3674]

an intrastate pipe line or company and selling gas solely in Texas, and we regulate the price. We have had a lot of cases, a lot of litigation in the past, a lot with Lone Star, for example, say, in Dallas, they had a monopoly, had, one time in Dallas, so we had the responsibility of fixing the price they could charge, but we never went back to trying to fix the price that the producer received because at Lone Star you just go pay three cents or ten cents, whatever the competition, because there are a lot of producers of gas; then from the time you pay that, then we watch what you do from then on. We look into your total capital investment and give you a reasonable earning on it, and we have to discharge that responsibility.

Our interest isn't to represent the producers here, as you can well see. We hope we do the right thing whether it is politically expedient or not, but we are elected and there are a heck of a lot more consumers of gas in Texas than there are producers, and we move in every chance we can to force a reasonable and the cheapest—which is our definition of reasonable—price of gas to the consumer, but we don't meddle with what the producer gets, because if we did meddle with what the producer gets, presumably our only legal basis—for example, we might say, Mr. Producer, what do you have in that well? What did it cost

BLEED THROUGH

BLURRED COPY

you? How much do you have invested in finding gas and so forth? You

[3675]

see, the first thing you knew you'd be claiming a lot more—up to now the producer has rarely realized his investment out of the gas and we think the consumer has profited by us not trying to regulate the price of gas, just letting them freely compete for it, and I feel you will profit the same way.

If one company controlled all the gas in Texas, boy, that would be a vastly different situation, but the fact there is free competition between the producers of gas, just as in oil, makes it seem to us that we ought not to fix price. We ought to not have the authority to raise it up. We may be given it, and then we are sure enough going to be in conflict, I guess, but we like to let you get it as cheap as you can wherever you can, and then the company that has a monopoly as a pipe line—I don't understand that your company produces in Texas?

MR. McALLISTER: Michigan-Wisconsin does not.

Might I ask you one question there, Mr. Murray, and that is this, you have never made any study to determine whether or not with respect to the supply of gas to a particular pipe line, whether one or more producers may have such a control over available gas that it amounts to a monopoly, you have never made a study to determine that, have you?

THE WITNESS: I have made a considerable study on supplies of gas. I won't say my studies should permit me

[3676]

to reach a conclusion, although I didn't make the study for the purpose of determining that fact, and I don't think that any producer in Texas has the control over the supply and no pipe line can afford to be dependent upon a single producer because we are not going to let it work out that way.

I have been explaining earlier that if we have the right to fix allowables, if Phillips is the only source of supply, Phillips isn't going to be given the allowable that enables them to meet the demand. We cannot permit Phillips to produce the gas you need in Wisconsin.

MR. McALLISTER: I mean they supply all the gas that goes up there, they have a contract to supply that and the pipe line company has a contract which obligates them to buy all the gas from Phillips.

THE WITNESS: Even if you can get it cheaper somewhere else?

MR. McALLISTER: Yes.

THE WITNESS: Suppose Phillips can't produce enough?

MR. McALLISTER: I don't know.

MR. SPARKS: Oh, oh, under the contract in that situation, Phillips can supply the gas from the dedicated acreage and they can go out and buy it anywhere they want to.

MR. McALLISTER: Well, they have to take it off of you,

[3677]

and you have been supplying it—

BLEED THROUGH

BLURRED COPY

MR. SPARKS: (Interrupting.) Whatever can be produced from the acreage that is dedicated to the contract.

MR. McALLISTER: Or otherwise. You can supply it even though you can't get it out of your dedicated acreage.

* * *

Examination by Mr. Sparks

[3683]

Q. Mr. Murray, what is the basic purpose of conservation of oil and gas? A. Well, the basic purpose—

MR. McALLISTER: (Interrupting.) You are relating that to the operations of the Railroad Commission of the State of Texas and the State of Texas?

MR. SPARKS: The operations of the Railroad Commission and the basic purpose of the conservation laws of the State of Texas as you understand them as the Railroad Commission enforces and interprets the laws.

THE WITNESS: Well, I was about to give you an answer as to why I felt conservation of oil and gas in general was so important. If it relates specifically to conservation in Texas, I'll add certain other qualifications. In general, it is tremendously important because thereby we can assure for the longest period of time an abundant supply to the consumers and

[3684]

at the lowest price. It is particularly important in Texas because oil and gas represents so large a portion of our natural gas resources, our major mineral wealth, and we recognize that the quantities of oil and gas we have are

fruits. We keep discovering additional quantities but still we know they are fruits. The nation will suffer if we have to turn to other sources for our supply of oil and gas. Texas will suffer particularly because its principal economic resource will be exhausted, so the very economic lifeblood of Texas is oil and gas. The security of the nation is very vitally dependent on the oil and gas reserves of Texas, so the consumers of the nation that may be using Texas oil and gas and those concerned with the military security of our nation and every citizen of Texas who has any stake in the economic well being of our state have a vital concern in the conservation of oil and gas. Did that answer your question?

BY MR. SPARKS:

Q. Yes. In accomplishing the maximum conservation of oil and gas, is it the purpose of the Commission and the conservation laws of the State of Texas to so regulate the production of oil and gas that the maximum of oil and gas that is produceable from reservoirs is recovered? A. Would it be any trouble to read the question back to me.

(The question was read by the reporter.)

[3685]

A. Yes.

MR. McALLISTER: Mr. Examiner, might I ask the witness one question there.

BY MR. McALLISTER:

Q. You say the purpose of the laws and the Railroad Commission, the laws speak for themselves I presume? A. Yes, although it has taken a good many years to have

BLEED THROUGH

BLURRED COPY

them interpreted to where they spoke clearly to all of us. My understanding of his question, and I fear I possibly missed some of its content was he asked me if in following the laws and carrying out the duty of the Railroad Commission to accomplishing maximum conservation was it our purpose to regulate production so as to accomplish maximum conservation.

Q. I don't know whether Mr. Sparks meant anything by putting in the words to have you interpret the laws or the statute or whatever it was, but I think your answer makes it perfectly clear what you had in mind. A. It is our interpretation of the statutes and we have so concluded from the court decisions that that is the primary duty of the Railroad Commission in the conservation of oil and gas is to accomplish the maximum conservation.

MR. McALLISTER: Thank you, Mr. Murray.

BY MR. SPARKS:

Q. Mr. Murray, the very concept of conservation of oil and gas includes within it as a major premise that the objective is to secure the greatest ultimate recovery from the reservoirs

[3686]

of oil and gas discovered— A. (Interrupting.) Yes, that would be our definition—

Q. (Continuing.) —because that that is not recovered is lost? A. That is right, in other words, that is our definition of conservation, attaining maximum ultimate recovery.

Q. And that which is left in the reservoir and not recovered is in effect wasted insofar as any useful purpose to humanity is concerned? A. Yes.

Q. Is there in your judgment any relation between the price of gas and accomplishment of the purposes of conservation and maximum ultimate production and recovery of gas from reservoirs?

* * *

THE WITNESS: I would answer definitely yes. I was about

[3687]

to elaborate as to what relationship I felt existed, but possibly I should wait for a question.

BY MR. SPARKS:

Q. I'll ask you that next. What is, in your judgment, that relationship? A. I think I made some statements yesterday indicating specifically that relationship in certain instances. We have had to waste a lot of gas in Texas because the prevailing price was too low to make it economically sound to conserve that gas. I mentioned that particularly relative to the flaring of casing-head gas in my testimony yesterday, or at least I intended to.

PRESIDING EXAMINER: I thought you made that quite clear, Commissioner. I am just wondering whether or not it is going to be necessary to go back over it.

MR. SPARKS: I am not going back over that.

THE WITNESS: If I did make the point clear yesterday I'll pass on. Conservation of casing-head gas is particularly sensitive to the price of gas. Conservation of natural gas, recalling the definitions I gave yesterday, that is gas from a gas well, is sensitive to the price of gas. No gas well produces all of the gas that can be produced. It is produced until it reaches an economic limit. It is still

BLEED THROUGH

BLURRED COPY

capable of producing gas, but the rate of production is low and the cost of operating the well may be high, and so at the then prevailing price for

[3688]

gas a point is reached where it is no longer economically sound to produce that well, and so it is abandoned. If the price were higher, the well would be produced longer and the ultimate recovery would have been greater.

BY MR. SPARKS:

Q. And if the price were lower, the economic limit would have been reached sooner and there would be an abandonment of the well at an earlier date with a greater loss or greater volume of gas left in the reservoir and not recovered. A. That is correct. Now, I discussed somewhat yesterday what we call secondary recovery of oil. To some degree those same principles would apply with regard to gas. Not only is there cost involved in maintaining a well in operating condition, but a point is reached where the pressure of the reservoir, if it is a depletion type reservoir, the pressure in the reservoir no longer is sufficient to force gas through the pore spaces of the sand into the well bores, thence to the surfaces of the ground, thence through lines to the gathering line, and if compressors are installed, in some cases—West Virginia is one case I know of—the price of gas is sufficient to justify pulling even a vacuum on these producing wells which greatly increases the quantity of gas that can be exhausted. In Texas, generally, this isn't true of the Panhandle field, which, I guess, is most concerned here, but generally, particularly in the Gulf Coast, we consider 500 pounds as the economic

[3689]

limit. I don't mean I, the industry generally. In other words, when you get down to 500 pounds you abandon your well, because it isn't feasible to install compressors and gather the gas at lower pressures. As the price goes up the abandonment pressure of the reservoir will go down, and so there is another evidence of the relationship.

There has been a recent discovery or a tentative conclusion reached in the laboratories presently being subjected to field tests that has startled us a good bit. A depletion type gas reservoir or volumetric type as I have been referring to is one that is sealed off, it has just got gas in it. It is like air in a pressure tank at a filling station.

Q. You mean it doesn't have a water drive from the bottom? A. That is correct, it is sealed off, and the gas is produced as long as there is enough pressure in that reservoir to cause it to be produced and that was the type I was talking about abandoned at a pressure of 500 pounds.

Q. The Panhandle field is that type of reservoir? A. Correct.

Q. And the Hugoton field is that type of reservoir? A. Yes. Now, there are a great many gas fields that have water drives. Most of the gas fields of the gas companies, for example, are water drive fields, and we have always concluded without particularly inquiring into it that recoveries from these drive gas fields would be high. We just didn't bother to do

[3690]

a lot of testing. We figured, well, with the water flushing the gas out and gas being so much lighter than water it

BLEED THROUGH

BLURRED COPY

would just rise above the water and we'd get 90 per cent or better of the gas recovery.

Q. And as you have experienced, for example, in oil fields with the water drive? A. Well, we didn't exactly correlate that. I said yesterday 50 to 80 per cent was the ratio of recovery in a water drive field. We came to assume as we came more and more to realize, it is dangerous in the oil and gas industry to make any assumptions without testing them out. We thought recovery of gas from a water drive field was so simple we didn't need to worry about it, you'd get just about all of it out. We have recently discovered that recoveries of gas from a water drive reservoir will be about the same as recoveries of oil. In other words, what we had thought to be the most efficient type of recovery in a gas field, we now conclude we will get from 50 to a maximum of 80 per cent of the gas out, or to state it conversely, in the best of water drive fields you will leave more than 20 per cent of the gas and in many of them you'll leave as much as half of the gas. Well, now, all of those fields we have been counting on getting about 90 per cent of the gas, and I daresay again being permitted to divert, but I daresay this will be of some measure of interest to the Federal Power Commission because they take considerable interest in the

[3691]

reserves of fields, and I daresay they have presumed, because that has been the basis of many very able engineering and geological reports on recoveries, that you get about in the range of 90 per cent from these water drive fields.

Now to come back and say we may get only half from a water drive field does two things. It makes us take another serious look at the reserves we thought we had and we see we can't recover, and two, it starts us thinking, isn't there some way of getting that gas out. I did a bit of talking yesterday about these many barrels of oil we are leaving behind and our great interest to try and get them. As soon as we realize we have been guessing wrong on water drive gas reservoirs, then the next question is let's see for sure if that is true and then let's figure out something we can do about it. I don't think there is even anything in the literature yet on these conclusions.

Back a good many years ago there was some that pointed the way to it, but we didn't read then, I mean we didn't read between the lines. We saw these conclusions, these research results and left them hanging there; as so frequently happens some new discovery is made and you find that 50 years ago some pioneering researcher pointed the way there and we forgot about it. This was pointed the way to a good many years ago and now we are going back and testing it.

We are core drilling gas reservoirs and finding out of these cores there is half the original amount of gas left behind.

[3692]

My point there, again I recognize and I apologize for diverting this much from the particular issues in this case, but I think it is pretty important for all of us to begin to pretty searchingly look at these gas reserves. We don't want to count on the gas we don't have, and, two, I can

BLEED THROUGH

BLURRED COPY

now answer more specifically your question as to the relationship of price because we think already we see techniques are possible for getting some of this gas that would be left behind, but it costs money to do it, not exorbitant quantities but it costs several cents per thousand to do it and so unless the price is high enough to permit what we might refer to as secondary operations in a gas field, we can't get that gas and it can amount to as much as 50 per cent in a field we thought previously we'd just sit back and get all of it. I have diverted but do I make my point clear?

* * *

[3696]

Q. Yes. In addition to the situations you have mentioned, is there not in most gas fields and particularly for example in the Panhandle field acreage, both within the field and around the edges of the field where the sand is tight or thin, with low perosity and permeability, so that wells with low productivity, if drilled, can be expected. A. Yes.

Q. And is there not a relationship between price of gas and the amount of development which will occur with respect to the low productivity areas which exist in virtually all fields at some place or other? A. I believe I understand your question. In nearly any field there will be areas of productivity that at a given price it is not economically feasible to develop when at a higher price, it is possible to go in and develop those marginal areas and greatly additional recoveries can be expected. That is true in most fields. Portions of many fields, let me say. It is also true that some entire fields, large areas, are of such a low order

of magnitude of productivity that at a given price you can't develop the field at all. At a higher price it could be. Possibly I intended to and believe I made some reference yesterday—in times past when gas price was lower and markets unavailable it was common when you drilled for oil and encountered gas strata just to abandon the well. Only in relatively

[3697]

recent years has there ever been any intention of deliberately drilling for gas, and so the fact that great areas of gas in the past have been drilled into and abandoned because it wasn't economically sound and frequently they were just left open to the air—not so very many years ago a well drilling for oil blew out of control producing from a substantial gas reservoir. The operator just went off and abandoned it. They said we are not interested in coming back and doing the necessary work to bring this well under control and it sat there, and burned many, many millions of feet of gas daily, until the Railroad Commission—I was then in their employ as an engineer and was in charge of the operations—we took it upon ourselves to go in and kill that well.

Now, I cannot conceive today with a higher price for gas of the operator just walking off and leaving a well blowing about fifty million feet of gas a day in the air because they didn't want to spend the money to control it. I think now I have fairly generally answered your question of the relationship between price for gas in the conservation of gas from gas wells and the conservation of

BLEED THROUGH

BLURRED COPY

casing-head gas. My discussion on casing-head gas was principally given yesterday.

Q. Are there not areas of low productivity from which small wells, low productivity wells, can be expected in the

[3698]

Hugoton field? A. Yes.

Q. Is there not a relationship between price of gas and the volumes of casing-head gas which a gatherer can afford to extend his gathering system to collect—

MR. McALLISTER: May I hear that question, please, Mr. Examiner.

PRESIDING EXAMINER: Read the question.

(Last question read by the reporter.)

THE WITNESS: Very definitely. There is still a great deal of casing-head gas being flared in Texas that we hope to see utilized some day. At the present time, price for gas does not permit laying the gathering lines and compressor plants and processing plants and treating plants to handle that gas, and a lot of the casing-head gas conservation projects now in operation were built in contemplation of a higher price for gas than then or now prevails. It just seemed inherently sound to anticipate that gas would seek something nearer its level in price as represented by its intrinsic value. I mentioned yesterday its use as a chemical raw material but forgetting all that and just comparing it on a Btu basis with the cheapest of fuel, say, coal, the one of which we have the most abundant resources, and you would presume that gas at the well head would be bound to somewhere approach the

[3699]

price of coal at the mine shaft, and so we persuaded a good many companies to put in casing-head gas plants predicting to them that it had to seek its natural level and that even though they'd have to operate at a los for a time that the price would rise to where it would be an economically sound operation.

MR. McALLISTER: Might I ask a question there?

MR. SPARKS: Certainly.

BY MR. McALLISTER:

Q. Do you think the price of gas in the State of Texas should be geared to a price which would be the mine price of coal plus transportation costs to Texas? A. If by geared you mean if some authority regulated it to that, I say no. I think that as long as we have competition between the various sources of energy and competition within those sources that there oughtn't to be any gearing by any authority, that it ought to — supply and demand ought to— work those things out. That is a theory of mine. I believe in that system of economics, not so much because of the danger to the form of government when you have too much government control, I fear that danger, but also looking only to the welfare of the consumer. My philosophy of an economic system is one which does the greatest good for the greatest number. Therein, I wouldn't differ from a communist, I guess, but my practical observation as

[3700]

an engineer has convinced me that under the capitalistic system you get the greatest good for the greatest number

BLEED THROUGH

BLURRED COPY

and therefore if the communist was sincere in his alleged objectives and would look at the results with realism, compare what happens in his nationalized countries with what happens in a free enterprise, just for the common working man, I think we'd both conclude inevitably that you get the most good, and I am such a fanatic on the subject of conservation and so steeped in its meaning to the national welfare that although I would be appalled at the system of political doctorate that would give control to our federal resources, I would agree with that if in the long run it would give more to the public, but my studies have so firmly convinced me that only by having a minimum but a necessary amount of regulation by federal and state authorities and having a maximum of free enterprise, if it gets too much the price is low and if it gets scarce the price is high and that stimulates them to go get more, that is the only way in the history of the petroleum development of the world that any success has been attained.

I made yesterday a statement in serious conflict with the philosophy of a number of people in Texas and possibly in conflict with what may turn out to be the philosophy of our state legislature. I said yesterday that there is a relationship, in answer to Mr. Sparks, there is a relationship

[3701]

between price of gas and conservation. Come future years we would have paid many times what would have been required for recovery now, we would have been glad to pay many times that, but it is gone and doesn't do any good. I still don't want us to have the responsibility and short

of gearing gas price to any arbitrary standard. I just want to see it worked out, although it is sometimes kind of impatient to sit back and see the waste taking place while it is working out, but I think that will be the best results for the consuming public in the long run.

BY MR. McALLISTER:

Q. When you speak of competition between fuels, you mean your conclusion is based upon the assumption that there is the opportunity for that free competition? A. Yes. I hate to see gas burned for what to me as an engineer and a little smattering of its chemistry tells me is inferior uses. I hate to see gas burned where coal would do just as well.

Q. Under boilers and just, you might say, used in a line in some slack period of the year? A. That is right, I hate to see that.

Q. So do I. A. But I feel it would be more dangerous to say you can't burn it under a boiler if they can get it cheaper than they can coal or rather use it, it seems to me that

[3702]

intrinsic worth in a free competitive system is going to work the thing out better than any controlling board.

* * *

[3704]

Examination by Mr. Sparks

Q. From your knowledge and information as a Railroad Commissioner and knowledge of the industry, is it your judgment that there is competition among the producers and gatherers of

BLEED THROUGH

BLURRED COPY

[3705]

gas?

• • •

THE WITNESS: Well, broadly speaking I'd say very definitely competition existed. There are thousands of producing gas wells, many hundreds of different operators of gas, that they are going to sell to the—take the best offer made to them by a purchaser of gas. In turn, the purchaser has all these sources of gas to look to, and he is going to buy his gas presumably where he can get the best supply over the longest period of time at the cheapest price.

• • •

[3717]

Examination by Mr. Crenshaw

Q. Mr. Murray, you have already testified to the expense, the high expense that entails to conduct processing plants and gathering systems in order to utilize casing head gas in the production of oil. Is it so or not that the taking of natural gas or dry gas as compared to the processing and constructing of plants and so forth to market casing-head gas is cheaper. A. Whether taking of gas from natural gas wells is cheaper than gathering casing-head gas?

Q. Yes. A. That is a dangerous question to answer generally, but to answer it generally I believe I'd say yes. In general, it is cheaper to take gas from a gas well than to utilize casing-head gas. There is no question in general that is true.

Q. Based upon that general conclusion with reference to the relative cost of this processing and producing. I'll

ask you this question. Assume that a producer in a field is producing both oil and gas and that he has been flaring his casing-head gas in the production of oil— A. (Interrupting.) Excuse me, he is producing oil,

[3718]

casing head gas with the oil, and in addition is producing gas from gas wells?

Q. That is correct. And that you see fit, with a hearing, after hearing, to order the ceasing of the flaring of the gas or shutting down of the oil well. In other words, you tell him to utilize the gas, casing-head gas, which has been flared, and as a result of that order and in compliance there with the producer then invests whatever sums of money it may be to utilize the casing-head gas and put it on the market, so that when he gets done with that process, under your previous testimony where you said that the casing-head gas must receive the first call, he then puts together with his natural gas production the casing-head gas and fills his market demand. With that picture and assuming those facts, let us further assume that the Federal Power Commission steps in and declares that this producer is a natural gas company and as such it then follows through with a regulatory order regulating the price of gas downward. Under those circumstances and assuming those facts, I'll ask you to state if you have an opinion as to whether or not that producer would then find it more economically feasible to take wholly or solely from his natural gas wells and discontinue the taking of casing-head gas.

* * *

BLEED THROUGH

BLURRED COPY

[3720]

THE WITNESS: Possibly by answering this question I can avoid some of the basis of objection.

If the price of gas were lower—I'm making no assumption as to how it would come about—it could well result in it being impossible to go to the expense of gathering from each oil well its casing-head gas, collecting it, treating it, possibly sweetening it, compressing it, delivering it to a pipe line, and so we would see turned backward the thing I mentioned yesterday has evolved forward during the last few years when all of the casing-head gas was wasted and as the price of gas rose and as we were able to issue orders and have them sustained in the Courts, the Courts have pretty clearly indicated that the only reason they have sustained us was because the price apparently would reach a level where it would be economically sound, so the reverse could happen just as well. If anything reduces the

[3721]

price of gas then it inevitably follows we must go back to periods of wasting large quantities of casing-head gas. I haven't made any assumption as to whether the Federal Power Commission would do that or not. You all are more versed in these things than I. It is difficult to conceive of any regulatory body being concerned about the welfare of the public over the period of years, it is difficult for me to conceive of action, taken which would necessitate the wastage of large quantities of gas simply in order to realize temporarily a small percentage reduction in the retail

price of gas, which could result with the exhaustion of the supplies and a manyfold increase in price in years to come.

* * *

[3723]

BY MR. McALLISTER:

Q. You said to reduce the price. Supposing the price in a particular instance was 12 cents and it was reduced to 11-1/2 cents, which would still be the highest price in the field, your answer wouldn't apply to a case like that? A. No.

Q. You were thinking of unduly depressed? A. I think we would lose our authority to require the gas to be saved. I'm speaking now only of casing-head gas, at the point when a reasonable return was not realized on that operation.

Q. You weren't speaking of the price levels that would go beyond that limitation? A. That is right.

BY MR. CRENSHAW:

Q: In other words, Mr. Murray, having issued the flare gas order after a consideration that to do so would cause waste, then would it not be that under the circumstances related in the question that if the producer could not comply with that

[3724]

order as a result of having been regulated by some outside agency that that would materially interfere with your conservation problems? A. Yes.

BLEED THROUGH

BLURRED COPY

Examination by Mr. Sparks

Q. Mr. Murray, over the past 10 years have you observed, and particularly since 1945, I understand you have been on the Railroad Commission since 1945, is that right? A. '47.

Q. '47. You have been, prior to that time, familiar with the oil and gas industry? A. Reasonably.

Q. And you have observed from the statistics of the Commission a general increase in the price of gas over the past 10 years, have you not? A. I have observed a general increase in price of gas, not from the statistics of the Commission, because we don't keep statistics on that phase of it, but I am generally acquainted with the rise in price of gas.

BY MR. McALLISTER:

Q. It may not run back 10 years? A. Sir?

Q. It may not go back as far as 10 years?

[3725]

A. My observation in?

Q. No, I mean the trend. A. No, the trend upwards you mean, I guess?

Q. Yes, the trend upward. A. No, there have been ups and downs. I fear my answer was not very lucid there. I have generally observed the trend of price of gas over the period of the last 10 years, ups and downs. For the last several years it has been predominantly upward. You can back up more than 10 years. It is quite interesting how much cheaper the price of gas was in, say, industrial sales in certain areas of Texas, oh, say, in the middle 1940's

than it had been 15 or 20 years earlier. Instead of going up it had been declining. I have quite a bit of statistics on that, but I don't see its relevance here.

BY MR. SPARKS:

Q. And has any of the conservation measures of the Railroad Commission been made practicable because of the increased value of gas, particularly casing-head gas, over the past few years? A. Oh, yes.

MR. McALLISTER: Do you use the word value there synonymous with selling price?

MR. SPARKS: Certainly.

THE WITNESS: I say the value of gas is basically the same or increases as new discoveries are made, but I sometimes make

[3726]

a distinction, possibly not one valid here, between intrinsic value and going price.

BY MR. SPARKS:

Q. I was using value in the sense of price. A. And I answered it on that assumption.

Q. In your opinion will future conservation measures of the Railroad Commission be affected by the price of natural gas? A. Yes. I didn't elaborate on that, because I presume my previous answers would indicate my reason for answering in the affirmative.

Q. Can you elaborate here with regard to future conservation measures which in your judgment will be effected by price? A. We are still flaring a lot of casing-head gas, I am possibly repeating myself, that we cannot now require to be saved because it is not economically sound to do it.

BLEED THROUGH

BLURRED COPY

When the price of gas goes up, each time it goes up it brings in more gas that we can save. That is casing-head gas. Also I have discussed here earlier this matter of the loss of gas from a gas reservoir, and as the price goes up it will be possible to do more and more things to increase the recovery of gas, to get that gas that we are now leaving behind. I don't mean about surface flaring, I mean underground loss of gas.

Q. Underground wasteage through failure to produce it because it is uneconomical to make the expenditures necessary to produce it?

[3727]

A. That is correct. One of your earlier questions might indicate that I haven't been sufficiently clearing in stating that if you leave gas behind in a reservoir when you abandon it, that is just as bad as flaring it to the air.

Q. It is just as gone? A. It is just as gone, yes, sir, and someone could come back and say, oh, you didn't waste it, you know where it is, it is down there, but if it would cost you several times as much as to go down and redrill the field to try and get it out as it would be worth, then you might as well let it go to the air.

Q. The price would have to be tremendously increased to warrant going back into the field once it had been abandoned— A. That is right.

Q. And attempting to produce the gas left there underground? A. That is correct. And I would consider—now, this is probably not a legal definition that would stand up —as an engineer I consider as wasteful to fail to recover

something that you can now for a few cents more per thousand, even though you come back and get it later on for tens of cents per thousand, then I consider that difference in what it costs you to get it as waste. If you can get it now for three or four or five cents more a thousand and it is going to cost you 25 cents a thousand to come back and get it later, legally it might be argued that

[3728]

that wasn't waste, you got it but if it costs you 25 cents later to get it where you could have gotten it for five or less cents today I call that waste.

MR. McALLISTER: Could I ask one question there, just one question, a short one?

MR. SPARKS: All right. Just out of courtesy, Mr. McAllister I'll willingly accede.

BY MR. McALLISTER:

Q. Here is a field with abundant reservoir, let's say a trillion cubic feet, where the local sale price to carbon black plants and wholly within the state is five cents, the prevailing price in that field, with ample connections and reasonable outlets. A. This is sweet gas?

Q. Sweet gas, gas well gas. A. Excuse my interruption, but we wouldn't permit—that is not permitted to be sold for carbon black.

Q. I see. I got trapped myself. Let's make it sour gas just so I can go on. It doesn't make any difference what it is? A. If you will specifically make your illustration in the Panhandle field, then it would apply. We have a funny set of laws there. We don't—

BLEED THROUGH

BLURRED COPY

Q. (Interrupting.) Let's make it in the Panhandle field and it will be sour gas and say a trillion feet which makes a substantial reservoir, and adjacent to that is another field

[3729]

that has pretty well, let us say, petered out, where no part of that gas can reasonably be produced and gathered and sold with any substantial profit for five cents, and this gas which is abundant can be sold. Now, would you suggest that the gas from the abundant field be raised in price to, say, ten cents or whatever would be necessary in order to permit the operators over in the other field to produce their gas and compete with the other field or would it be more economical to say that those operators in that field may have ten cents which would cut them out by reason of competition. Just how in your conservation problem are you going to meet that situation wholly within the State of Texas, forgetting about any gas on the outside, going to the outside? A. Well, my philosophy has been, I indicated yesterday about our refusal to take jurisdiction that it has been argued we have, over setting a minimum price. It has been argued that we already possess the authority to fix a minimum price, because if it is lower than that it is going to cause waste, and there is strong basis for such argument, but the Texas Railroad Commission—I don't mean to take issue with the wisdom of states which have done it, or I certainly don't mean to challenge our legislature if they clearly say this is our responsibility and duty, but even though we argue the arguments on fixing prices, I say we would just stay out of that, and we want

to get in and help all we can to attain conservation but we didn't want to go

[3730]

to the point of saying, now, the price of gas in this near-exhausted field you were talking about, it is going to have to be 25 cents a thousand because that is what it will take to recover it. Well, heck, that is more than the going price of gas and to me that wouldn't be conservation to allow them a price in order to gather that gas that is going to be more than it is currently worth in the open market. If we were trying to fix price purely on the basis of cost, I'm afraid we'd just get hopelessly lost in a maze of situation there and we'd be fixing price up higher than anybody would pay for it. We'd have to order somebody to buy it, I guess, if we are going to set the price up to 25 cents and yet that might be required to conserve this gas, so all we would do from the standpoint of the philosophy of the Railroad Commission, we'd just stay out of price and we'd hope the price would be high enough to permit these reasonable things in conservation to be done. As it gets higher and higher more and more things can be done in conservation and in turn as more and more things are being done in conservation we save gas being wasted and make it available to the market, we are doing three billion feet of that a day in Texas and as the price gets higher and higher, the fellows are encouraged to drill for wells. Instead of passing up gas strata they complete gas wells and that in turn makes a greater supply available and that in turn forces the price back down. In fact, that is our theory of the only way of keeping a

BLEED THROUGH

BLURRED COPY

[3731]

reasonable price of gas through the years is to have it high enough that it furnishes an incentive to conserve and explore for it and that is the surest way of, one, having abundant supply, and two, keeping the price reasonable.

Q. Conservation and price go hand in hand and the price isn't the determining factor that is going to control conservation? A. Yes, it controls a great deal of conservation, but, and I don't mean to retract—

Q. (Interrupting.) I mean there are a lot of other factors. A. Yes. I don't mean to retract any of the statements I made of how closely geared conservation measure you could take was to the price. On the other hand I made that statement, I believe, in answer to questions by Mr. Sparks. On the other hand, I will say that our Railroad Commission takes a peculiar philosophy that even though we are the conservation agent we don't go out and try to control price.

[3732]

Q. You mean the higher the price goes the more you can conserve? A. That is right. The more exploration there will be for us, the more abundant will be the supply and that, of course, will bring the price back down.

Q. If it was a dollar per Mcf? A. We'd all be drilling for gas. We wouldn't waste a foot of it, and we'd have so much gas that the market would break and the price would come back down. That is our fundamental philosophy in Texas which I recognize is possibly not a commonly accepted philosophy today but we fundamentally

believe that in the long run the consumer will benefit mostly by that policy. Bear in mind, we have had some bitter litigation in Texas. Wherever a company had a monopoly going into a city, they charged whatever they wanted to, the customer had to pay the price or not get any gas, we have gone in and regulated those prices and have had some bitter feuds over it, but on the other hand I mentioned earlier the matter of industrial prices because competition existed, we haven't taken jurisdiction. I could cite a case, say, in Houston there where in the '20's request was made for the Railroad Commission to assume jurisdiction over the price of gas sold to industries and the Commission refused to do so. I may be a little wrong in my dates, the late '20's,

[3733]

I believe it was. In the middle '40's the price of gas, even though no jurisdiction had ever been assumed, nobody ever regulated it, the price of gas—and the general trend, market index had been going upward—the price of gas to those same industries was considerably less than a half of what it had been fifteen or twenty years earlier. Competition had been what had cut it.

BY MR. McALLISTER:

Q. On these long pipe lines going to outside states where if it is true a monopoly exists, you would feel, I think, from the answers you have made, that regulation is desirable?

MR. SPARKS: Of whom?

MR. McALLISTER: Regulations.

BLEED THROUGH

BLURRED COPY

MR. SPARKS: Of whom, the pipe lines?

MR. McALLISTER: The pipe line company.

THE WITNESS: I might not say desirable, but I would say essential.

BY MR. McALLISTER:

Q. Yes. A. Wherever we move in and issue orders, we don't consider that that is particularly desirable, but that is the only way of attaining the necessary objective in the public interest.

Q. That is right.

[3734]

A. And so we never glorify in our authority to do such and such a thing. We would rather that natural forces would work it out so it wasn't necessary. And if it were possible to have enough of these long pipe lines, if you didn't have to build them so big and have so much money invested in them, if you could have enough of them, then I'd say regulation wasn't desirable, let them compete with one another, but that isn't desirable, and if it isn't desirable it becomes necessary. Our theory down here, the producer—the regulatory authority ought to see that pipe lines is taking advantage of the best he can get from the producer. If some producer will sell him gas cheap, why, by golly, go out and take it, but not to regulate the producer of gas.

• • •

[3735]

A. All right, twenty-five years. I doubt if Phillips says we hereby dedicate our reserves, they just sign a con-

tract tying their reserves up, and so out of that comes the term dedicated which simply means it is contracted for. I presume the escalator clause on the price was in that contract that committed those reserves for twenty-five years and if Michigan-Wisconsin could have gotten better prices

[3736]

for gas and tied it up that many years somewhere else they were perfectly free to do it and that the Federal Power Commission had full knowledge in advance before they ever granted this certificate of convenience and necessity of what those contracts and commitments were, and they could have said then, why, you are committing to Phillips, if the assumption is true, at too high a price, we are not going to approve this thing until you go get reserves dedicated, which means contracted, at a lower price. We have exactly opposite that situation existing in the Carthage Field. Their operators committed or dedicated, using the terminology here, reserves over a long period of time at what has turned out to be a disproportionately low price and on the free market gas in Carthage is bringing a much higher, two and a half to one or more, price to what they committed and they come into the Railroad Commission and say you ought to assume jurisdiction and you ought to make them pay us what the going price for gas is, we may have to do that. I mean the legislature may say that is our duty, but we said we didn't make you sign that contract, your neighbors over here were being drained for a while because they wouldn't sign the contract and they held out, they thought gas was going to

BLEED THROUGH

BLURRED COPY

be worth more. If it had gotten cheaper you would have been sitting in wonderful shape with your contract and your neighbors would have to sell it for less, so we felt that was sort of a free right of the

[3737]

purchaser and seller to work this thing out and if Michigan-Wisconsin contracted to Phillips, I don't know the fact and this may be an erroneous assumption, but if they contracted to Phillips in order to get Phillips reserves tied up for twenty-five years and agreed to pay them so much now and raise it so much every year, why, they did that before they ever built the pipe line and the people of Wisconsin and the Federal Power Commission presumably had full knowledge of that, and when they were looking to decide whether or not there were gas reserves down there, they knew what they were going to have to pay for them under that contract and just as we have said to these people in Carthage who have dedicated their reserves and gotten themselves tied up at what they consider a low price for a long period of time, we said, fellows, we didn't make you sign your contract. It looks unfair for everybody around you to be getting more than you, but you signed the contract. Now, if Michigan-Wisconsin signed the contract and agreed to purchase gas, we consider that a sacred deal, too, even though the price may be higher than prevailing. I don't know whether that is true or not.

That is a long winded answer and I apologize for it, but that indicates our philosophy in Texas, why we won't assume jurisdiction in Carthage and make them raise the price, and why we don't think this sacred right of contract

[3738]

should be broken if they feel they contracted at too high a price.

BY MR. McALLISTER:

Q. Over in Carthage if the state gives you the authority and you fix the price over there at let's say, six cents or a couple of cents higher than the contract you are talking about, is there any authority in your state which would permit you if this price over here is too high to bring it down to what is a fair price? A. We don't have the first authority now—

Q. (Interrupting.) No, you don't have, but I am assuming you do get it. A. If we got it they might say you can fix it up or down either.

Q. You can only fix a floor, you can't fix a ceiling and a floor both? A. We don't think we can do it at all now—

Q. (Interrupting.) I know that, but suppose you are given authority, the bill is pending in the legislature. A. Frankly, I am embarrassed to admit this, but I haven't read the pending bill, that is an embarrassing thing for a member of the regulatory body to admit, but I wait until they pass them, if they do then read them.

Q. Do you think for the sake of the people of Texas, the producers, you ought to be able to raise the

[3739]

price, to fix the floor you might say on the basis of what you term conservation and then there exists no— A. (Interrupting.) Could I answer it part way, the first half, and then I'll answer the second half. I don't think we have

BLEED THROUGH

BLURRED COPY

that authority. You are just talking about fixing a floor. I don't think we have that authority. I don't think we ought to have it. We don't want it. Now, we are in serious disagreement with a lot of sound thinking reasonable people, we recognize, but if it is an honest difference of opinion there is no use dodging it. We don't think we have the authority, even though some have, and briefs can be presented to us as to why we now have the authority, and we don't want it, and we don't think we ought to have it, and we don't think in the long run it is in the best interest of the people of Texas or the nation for us to have that authority, and for that same reason it would be inconsistent, I think, for us to come here and oppose you fixing price on the producer and at the same time seek the rights to fix price ourselves. It possibly would be consistent. We could say this is something the states ought to have and not the Federal Government, but we are doing more than that. We are opposed to the basic principle, rather than who has the authority, state or federal, and this may be a last ditch stand, but we are opposed to price fixing at the producer level.

[3740]

Q. But if there is that authority you state given and exercised to fix a floor, isn't it by the same reasoning proper that some authority protect the consuming states so far as the ceiling is concerned? A. I would presume so.

Q. I mean wouldn't that be your judgment? A. Yes, sir.

* * *

[3742]

Examination by Mr. Sparks

Q. Mr. Murray, the Federal Power Commission has certain powers for requiring a natural gas company, that is, one who is a natural gas company under the Act, to secure a certificate of public convenience and necessity as a condition to the construction and operation of facilities subject to the jurisdiction of the Commission. Now, I am not going to ask you to construe the Natural Gas Act. That is a matter of law—

[3743]

A. (Interrupting.) Thank you, sir.

Q. (Continuing.) —and for the purpose of this question, I am going to assume that the Commission does have the power to require those engaged in the gathering and processing of natural gas, if they are natural gas companies, to secure a certificate of convenience and necessity prior to the installation of facilities to gather and process gas. On the basis of that assumption, if it be correct, would the exercise of such power by the Federal Power Commission conflict with the efforts of the Railroad Commission of Texas to conserve natural gas, particularly casing-head gas which the Commission has required in the past in certain cases to be utilized and which the Commission will probably require in the future to be utilized in additional cases.

MR. McALLISTER: I haven't any objection to the question except Mr. Sparks has used the Commission in

BLEED THROUGH

BLURRED COPY

relation to the Federal Power Commission and the Texas Commission. I think may be it is clear.

* * *

[3744]

PRESIDING EXAMINER: Do you understand the question?

THE WITNESS: I'll have to restate the question as I understood it and see if that is correct and then that possibly would clear up any conflict. I got a little bit lost, but my understanding was you have asked me to assume that the Federal Power Commission has the authority to require a certificate of convenience and necessity before any extension to the gathering facilities of an interstate pipe line can be built.

BY MR. SPARKS:

Q. Or before an extension to the gathering facilities of a gatherer of natural gas. A. I see.

MR. McALLISTER: Why can't we define those facilities, just say all facilities, pipe line, gasoline plants and what-not?

THE WITNESS: Let me try it this way, if the Railroad Commission of Texas issues an order requiring certain casing-head gas to be utilized and if the nearest pipe line to that field where the gas is now being flared and we are ordering it to be utilized is a pipe line under the authority of the Federal Power Commission, and I haven't said what it was there, assuming

[3745]

it is under the authority, and if the Federal Power Commission has to grant a certificate of convenience and neces-

sity before this pipe line can comply with the Railroad Commission's order and take the casing-head gas, would that be a conflict. That is my general understanding of the tenure of the question, is that substantially correct?

BY MR. SPARKS:

Q. If it would require a certificate of public convenience and necessity from the Federal Power Commission to gather and whatever else was required to process the gas— A. (Interrupting.) There would exist a conflict—well, I am about to say there would be a conflict if a conflict existed, which isn't a very sensible answer, but if anything interfered with our authority to get that gas that is being wasted utilized, then it would be a conflict, and if the company we were ordering to take that gas would say, no, I can't do it, I've got to get a certificate of convenience and necessity from the Federal Power Commission, why, then there would be a conflict.

* * *

[3747-3748]

Q. (Interrupting.) Let's assume there is gas flared in the field. A. All right.

Q. And that to get that gas to the gasoline plant would require the laying of additional gathering lines or perhaps the construction of an entire gathering system— A. (Interrupting.) That is very commonly the case.

Q. Certainly. Now, in such a case, if it were necessary to secure a certificate of public convenience and necessity from the Federal Power Commission before that gathering system could either be extended or constructed, then would not that interfere with the orders and carrying out, your

BLEED THROUGH

BLURRED COPY

seeing to the performance of the order, that the gas not be flared? A. Very definitely. If anything kept us from requiring the gathering system to be built, these wells where the gas, oil wells where the gas, is being flared, from being connected to a processing plant and it in turn being put in a pipe line, anything that interfered with our doing that would be a conflict with what we presume to be our exclusive field of authority and

[3749]

would be in conflict with the attainment of conservation.

* * *

Q. Even if the Federal Power Commission in such a case should grant to the gatherer a certificate of public convenience and necessity, if an appreciable time were consumed in the securing of such a certificate by the gatherer, would not that contribute to waste and conflict with your enforcement of your order? A. Yes, if we issued, say, now, we issued the order today and it would be effective July 1, that you have to have this gas being utilized or maybe I'd better say August 1 or September 1—

Q. (Interrupting.) You have issued them on shorter notice than that? A. Oh, yes, we sure have.

[3750]

Q. Considerably shorter? A. That is right.

BY MR. McALLISTER:

Q. And longer? A. That is right.

BY MR. SPARKS:

Q. Some 17 of them on two weeks notice, I might

state. A. Well, we considered we had given them quite a bit of advance notice, although frankly I did take issue with my colleagues, I wanted to give more time interval. My colleagues took the position we had been holding hearings over a year's period of time and they didn't need any more warning. If we order on a certain date, soon or far off and that date comes around for compliance with our order and the Federal Power Commission hasn't yet given authority for the construction of these lines, then we have reached an impasse and have a conflict.

PRESIDING EXAMINER: Have you had any such instances so far?

THE WITNESS: Not to my knowledge.

BY MR. SPARKS:

Q. To your knowledge has the Federal Power Commission ever taken jurisdiction over a producer and gatherer of gas? A. No.

* * *

[3751]

Q. I believe you stated that under proration of gas, where the indicated market demand from the fields was prorated among all of the wells in the field, on a proration formula adopted by the Railroad Commission and calculated to equitably distribute

[3752]

that allowable among all the wells, that if there were more than two or more than one takers of gas from the field it would be a remarkable coincidence for any of the nomi-

BLEED THROUGH

BLURRED COPY

nators of gas to have allowables assigned to the wells connected to that particular company's pipe lines which would equal, exactly equal, its own market demand. Do you recall that testimony? A. Yes, I so stated, and I think Mr. Baumel more adequately explained that fact yesterday.

Q. That is right. And in such cases ordinarily a particular taker either is connected to wells which have allowable assigned to them, which either is in excess of or less than the market demand of that particular taker of gas? A. That is correct.

Q. With the result that under proration in order for each taker to have such supplies of gas to satisfy his market demands over a period of time, which, of course, takes into consideration the possibility of overproduction for a short period of time, it is necessary that there be interconnections so that those who are short on allowable can receive the gas of those takers whose connections are long on allowable, isn't that right? A. Yes. That is true today, and it is going to become more and more—I was going to say more true, that is poor philosophy—it will be necessary to have a greater freedom of interchange in the future than exists even today and eventually

[3753]

it will have to come to the point as now exists with oil, where no company is able to produce or gathers from its own connections just what its demand is, but there is a free exchange between the different companies. The oil is all at the same price, the same grade of oil, and they are not worried about whether it moves into intra or inter-

state commerce, so they just swap it back and forth freely and that is very essential and it is going to have to become essential in the gas industry.

Q. Has the Railroad Commission of Texas found that producers and gatherers who do not operate these long interstate pipe lines have been reluctant to sell their excess allowable in such cases to the interstate pipe line companies which were short on allowable? A. Oh, very definitely. I mentioned that yesterday, I think.

Q. In your opinion, if it is ultimately held that producers and gatherers of natural gas who sell such gas to the interstate pipe lines are natural gas companies and their contract sale prices are subject to regulation by the Federal Power Commission, will the Commission's difficulties in inducing such producers and gatherers to interconnect so that the pipe line companies who are short on allowable will receive their proportionate part of the total market demand from the field be increased?

MR. McALLISTER: I object, Mr. Examiner, there is no

[3754]

testimony here that the Railroad Commission of Texas has or exercised authority to require those companies to interconnect.

PRESIDING EXAMINER: Well, I think perhaps the question is unfortunately phrased, but I think if the witness understands it he should be permitted to answer.

Do you understand the question, Mr. Murray?

THE WITNESS: Might I ask the reporter to read it back to me, please?

BLEED THROUGH

BLURRED COPY

PRESIDING EXAMINER: Yes, read the question.

(The question was read by the reporter.)

THE WITNESS: I believe I understand it.

PRESIDING EXAMINER: All right.

THE WITNESS: Yes, the difficulty would greatly be increased. I have previously stated that there was a considerable reluctance on the part of some and outright refusal on the part of other companies to tie into any pipe line that was under the jurisdiction of the Federal Power Commission for fear that by tying in they themselves might be subjected to the control of the Federal Power Commission.

To me, possibly I was naive in that, but it has been very real to these companies and it has been a very definite barrier, as I think I pointed out yesterday, to attainment of conservation and to the attainment of equitable correlative withdrawals between various wells in a field and various fields. If the presumption you made should become an actuality, then what I

[3755]

have felt was an unnecessary fear would become a reality then and they wouldn't be scared of what might happen, they'll be dreadfully afraid of what has happened. On the other hand—this is not responsive to your question, but if I am permitted to volunteer this statement—I feel, and this may be wishful thinking, but I feel that there likely will come from the Federal Power Commission, maybe as a result of this case, a refusal to move in and take control of certain fields that they may feel belong exclusively to

the Railroad Commission. I wishfully think, but I think there is a very strong probability that out of this very case may come a relief from those fears that is such a handicap for the attainment of conservation today. The Commission may clearly say we are not going to take jurisdiction of certain things or Phillips or something like that, and repeatedly I have been asked about whether or not conflict exists or could exist and under the assumptions it would very definitely exist, but I by no means feel that it is necesary that there be conflict between the Federal Power Commission and the Railroad Commission nor do I believe that when we have a clearer understanding of these things a conflict will exist and that instead we will cooperate and work together as partners on these matters.

BY MR. SPARKS:

Q. Do you mean that if the Federal Power Commission takes jursdiction over Phillips Petroleum Company as a natural gas

[3756]

company and over other producers and gatherers and regulates their sale prices insofar as their sales are made to interstate pipe line companies, that it will not have any effect on our —A. (Interrupting.) Oh, by no means.

Q. Conservation program. A. By no means, but the Federal Power Commission hasn't said they are going to take jurisdiction of Phillips, have they? They are simply holding an inquiry. We have this thing happen on railroad hearings constantly. We set a matter down for hearing and panic exists amont the industry. Simply because we are holding a hearing on the subject doesn't mean we are

BLEED THROUGH

BLURRED COPY

going to do it. It means we are simply making an inquiry into it. The things they get panic stricken we are going to do, as soon as we develop the hearing, we relieve their fear. I sort of feel that that is what is going to come of this. I share the concern that if things that the Federal Power Commission is inquiring into became an actuality, I realize a conflict would exist, and in answer to your question, and I have drifted away from it, very definitely, I can be specific, if the Federal Power Commission should take jurisdiction over Phillips, it would prove the point that these companies have been alleging fear before, it would prove us of the Railroad Commission wrong, and we'd find it next to impossible to get further conservation measures, where we needed to put gas into interstate pipe lines, but I don't consider that an actuality and to me it may be

[3757]

you will say it is wishful thinking—I don't believe that out of this hearing will develop a thing that will interfere with the authority of the Railroad Commission.

Q. I don't either, Mr. Murray, but I just want to be sure that your statement of what you thought was going to exist was predicated on that— A. (Interrupting.) I hope my statements were clear there.

Q. Your last statement makes it clear. A. To repeat now and this supersedes all my other answers, specifically to your question, the answer is yes, it would create a great deal of additional concern and interfere gravely with our ability to get flare gas utilized and with our ability to

provide for ratable take from all wells and all fields alike. Did that finally specifically answer your question?

Q. Yes, sir.

* * *

[3758]

MR. McALLISTER: The authority to fix the price to protect producers ought there not also be an authority to regulate the price, a maximum price, for the production of consumers in consuming states. I think that is the question I put to you.

THE WITNESS: That was my understanding, if you are going to set a minimum price, shouldn't you also set a maximum price.

MR. McALLISTER: I mean the authority exists when the necessity arises to protect the consumers in consuming states.

THE WITNESS: My answer was I didn't think we now had the authority, we meaning the Railroad Commission of Texas, now have the authority or should have the or desire it, that if we are given that authority, I would have no idea as to what other authority would tie in with it and responsibility, but in my own opinion I agree with counsel that if it is reasonable to set a

[3759]

minimum price it would be reasonable to set a maximum price.

MR. McALLISTER: That is exactly what I understood you to say before.

* * *

BLEED THROUGH

BLURRED COPY

[3762]

Cross-Examination by Mr. McAllister

Q. Did I understand you to say this morning, Mr. Murray, that as an abstract proposition if the Federal Power Commission took jurisdiction over Phillips Petroleum Company in any part, that that would interfere with your conservation program in the State of Texas? A. I believe the questions were somewhat more specific than that, and we tried to discuss, based on assumptions, but if specific things occurs and I answered if those specific things ocurred there would be an interference.

Q. Yes, but the mere fact that the Federal Power Commission did find that Phillips Petroleum Company was engaged in the transportation of natural gas in interstate commerce or in the sale of natural gas in interstate commerce, that would not necessarily mean that there would be interference with your conservation laws in any way? A. I don't exactly know what finding that they are a

[3763]

natural gas company means or what it would result in but simply making a finding, if it wasn't followed up with some regulations, I wouldn't see—

Q. (Interrupting.) Well, if regulations did follow it would be those regulations in specific instances that would bring about or work the conflict, let's call it, with your conservation authority, and the exercise of that authority? A. That is correct. It would be the specific regulation. Now, it is difficult for me, and I readily want to admit that I

am not acquainted with just what is involved in declaring the company a natural gas company, but it is difficult for me to understand why the Federal Power Commission would have any desire, if they do, and I certainly recognize or so understanding that they have officially indicated no desire, they are just having a hearing to go into the matter—

Q. (Interrupting.) Yes. —but I cannot understand why they would ever take jurisdiction, except in anticipation of issuing certain regulations.

Q. That is right. A. And the only regulations I can conceive of would result in actions that would be in conflict. Now, maybe—

Q. (Interrupting.) You think that? You think there would be that conflict? A. I may be completely in error. None of the types of

[3764]

regulations that we have discussed might result, but knowing no more about the Federal Power Commission's intentions or responsibilities than I do, my presumption has been and it is purely a presumption that if they did take jurisdiction it would be for the purpose of issuing regulations of the sort that have been described to me in these questions, and if those regulations of that sort were issued, I do believe that conflict would result.

Q. In other words, your answers were not general answers but the specific answers to the questions you had before you at the time you made your answer? A. Yes, sir; even though they were making specific assumptions,

BLEED THROUGH

BLURRED COPY

they were still rather general, but not so general as to say if the Federal Power Commission takes any jurisdiction over Phillips would a conflict result, and I never did intend to say any jurisdiction would result.

Q. You mean any conflict would result? A. That is right, if they took any jurisdiction, but I can't quite conceive, I may be in error, of what jurisdiction they would take over Phillips without conflict resulting.

Q. Are you familiar with the Canadian River Gas Company at all? A. I am familiar to some extent, not intimately.

Q. You know that they produce gas, do you not? A. Yes.

Q. Large volumes of gas? A. Yes.

[3765]

Q. And they operate gasoline plants? A. Yes.

Q. And they have gathering systems? A. Yes.

Q. And they operate under your proration law? A. Well, they try not to. They have a suit on with us right now saying we are above any proration order issued.

Q. But you did exercise authority over them and did force them in 1949 and '50 to close in wells? A. Yes, sir.

Q. And— A. (Interrupting.) No, excuse me, we didn't force them to close in wells, I don't believe. We prevented them from getting all the gas they wanted to get from the wells.

Q. There may have been some wells closed in, you don't mean to say there were no wells closed in during that time during the period?

MR. BAUMEL: Not under the Commission's orders.

BY MR. McALLISTER:

Q. Well, you closed them down and required them not to exceed the maximum you fixed? A. We fixed an allowable which was less than the amount they wanted to produce.

Q. And they observed that rule? A. So far.

[3766]

Q. So far? A. Yes, sir. I mentioned that yesterday. They went into federal court and then they filed it in district court and I am not exactly acquainted with where the case is now.

Q. I mean to say you know that Canadian River is a natural gas company under the jurisdiction of the Federal Power Commission, is it not, and has been for a number of years? A. That is my understanding. I understand they have a long interstate pipe line.

* * *

[3767]

Q. I mean to say now, the next question is has there been any interference by the Federal Power Commission which impaired your ability to conserve or enforce your conservation laws by reason of the fact that they had jurisdiction over Canadian River?

[3768]

A. Well, it hasn't been realized, but it has been alleged and we seriously concerned ourselves about our authority

BLEED THROUGH

BLURRED COPY

to do what we thought was necessary to preserve equity in the Panhandle. We waited a long time, I don't know whether that is a fair answer or not, because the thing is still under litigation, but we were told and we worried a lot about it, whether or not there was interference that has been realized, I can't say there has been any.

Q. The position taken was by the gas company, by Canadian River? A. Primarily, yes.

Q. Well, and who else? A. Well, producers and counsel would come—now, we just are worried about your authority and all like that. I am possibly answering out of turn. You get a lot of friends of yours coming in and advising you on things that are not supposed to be related to the particular company in question, and we had other people who said, look, I'm just a bystander and you are going to run into this, that and the other, and we were not sure they were doing that for Canadian River or on their own, but other people were counseling with us as to what our authority might be, not Federal authority.

Q. But the Federal Power Commission did not at any time

[3769]

intervene in the case or question your authority to do what you did? A. Not to my knowledge.

Q. Well, you would know if they had? A. I believe I would.

Q. And your primary order which was in question was the establishment or proration and limitation upon Canadian River as to the volume of gas they could produce

from their then existing wells, isn't that right? A. That is correct, yes, sir.

Q. That is the genesis of all your conservation authority, isn't it? There is a lot of exceptions but that ability to control production is the basic root which supports your efforts to conserve gas and oil? A. If I understand the ramifications, I could say yes.

Q. Well, of course, there is the other thing about physically blowing it in the air, that is another one? A. You are simply saying that that is one of our principal tools for exercising our conservation authority and that is to control production. It is not the only one, we both agree but it is a major one.

Q. Isn't it a basic and fundamental one? A. I would think so. It is certainly one of the most basic ones and I think of none at the present that is more basic.

•

[3770]

Q. Another one would be, if there is another one of equal magnitude, it would be your power and authority to prohibit production of oil or gas or oil and gas if the product is not for some useful purpose? A. Yes.

Q. The Panhandle Eastern Pipe Line Company operates a number of wells and produces gas in the State of Texas, does it not? A. Yes.

Q. And that you know also is a natural gas company? A. So I have understood.

Q. And there has been no time when the exercise of authority by the Federal Power Commission over Panhandle has interfered with your conservation authority in

BLEED THROUGH

BLURRED COPY

the State of Texas, has it? A. Not to my knowledge, and I believe I'd have knowledge if it had.

Q. And Panhandle, in the course of their operations, must produce the gas from the wells it operates and gather it into its lines? A. Yes.

Q. The Cities Service Gas Company also operates certain gas wells in the State of Texas, does it not? A. Yes.

Q. And it also gathers that gas and brings it into its lines, does it not?

[3771]

A. Yes.

Q. Do you know of any instance where the fact that they are well, I should ask the other question. You know they are a natural gas company under the jurisdiction of the Federal Power Commission do you not? A. I'd have to honestly say no I don't. It probably should be a matter of knowledge of, but I just haven't had occasion to inquire into it.

Q. Well, I can state affirmatively that they are— A. (Interrupting.) I have no question of it. You asked me did I know it and I had to honestly say no.

Q. Well, it is supported by decisions of the Federal Power Commission and the Supreme Court of the United States. And the exercise by the Federal Power Commission of its authority over Cities Service Gas Company as a natural gas company has not, has it, interfered with the full exercise by you of your conservation powers and authority in the State of Texas? A. You know, there are different Cities Service companies, and I don't—

Q. (Interrupting.) Well, this is the gas company, there is Cities Service Oil and Gas companies. A. Do you have authority over the Cities Service Oil Company?

Q. Not that I know of. A. That is the one I know most about and I have never run into anything where the Federal Power Commission had exercised

[3772]

their authority. It would perhaps be helpful for me to admit my limitation of knowledge. I am reasonably conversant with companies operating over the State of Texas but my knowledge in the Panhandle is most limited, and unfortunately, I guess, that is where knowledge is being most needed, but if you would question me relative to some of the pipe lines going out of East Texas and Gulf Coast and South Texas, I believe I have a better knowledge there. It is unfortunate that I have never worked in the Panhandle. Most of that was developed years ago before I worked for the Commission or came to the Commission, and I just knew the Canadian River and Panhandle Eastern were all gas companies for a long time, but we have never had any real issues up there and where I am more conversant, if you could illustrate the point of something that is taking place in Carthage and some of the fields along in there, I possibly would be better qualified to answer.

Q. I mean the application of the law in East Texas would not be any different— A. (Interrupting.) I wouldn't think so, and I have a better knowledge of the situation. It would make no difference except I wanted to admit my embarrassment at not being better acquainted with the Panhandle companies.

BLEED THROUGH BLURRED COPY

Q. Are you familiar with the Lone Star Gas Company? A. Reasonably.

Q. You are familiar with the fact that they operate

[3773]

gasoline plants, are you not, for processing the gas? A. Yes.

Q. And that they have a gathering system by which they collected gas for processing in these plants? A. Yes.

Q. Are you familiar with the fact that the Lone Star Gas Company is a natural gas company under the jurisdiction of the Federal Power Commission? A. Yes.

Q. Has the exercise of that authority by the Federal Power Commission over Lone Star Gas Company in any way interfered with the efforts of the Railroad Commission of the State of Texas to enforce its conservation laws and authority? A. No, and to my knowledge the Federal Power Commission has never exercised authority down to the field of production. Now, I think that Lone Star, there is a separate production company. If they have production it is called Lone Star Producing Company or something like that. Do you exercise jurisdiction over Lone Star Producing Company?

Q. I don't think so. A. There is where my knowledge of production—there has never been any interference and I have never presumed that in the field or production that the Federal Power Commission assumed any jurisdiction.

* * *

[3777]

Q. If with respect to Lone Star Gas Company, Panhandle Eastern Pipe Line Company, Cities Service Gas

Company and other—well, those three, there could be others, but I'm not going to

[3778]

name them, if with respect to those companies which are natural gas companies and subject to the jurisdiction of the Federal Power Commission, there are also other companies whose operations in part parallel the operations of the three companies which I named, would you say that because they may be doing other things, directly subject to your jurisdiction, that the Federal Power Commission should not exercise jurisdiction over Phillips and other gas companies or petroleum and oil companies, simply because they are under your jurisdiction in one respect but carry on operations parallel to those which are under the jurisdiction of the Federal Power Commission and exercised by the Federal Power Commission in relation to Lone Star, Cities Service, Panhandle.

* * *

[3779]

A. I am not able to draw the line or have knowledge of whether the parallelism exists or not, but if for example Phillips under its name and identical corporate ownership had a pipe line, we will say, going to Chicago, that portion of their operations consisting of this transmission line taking gas to Chicago, I'd say, would be under, should be under, the jurisdiction of the Federal Power Commission, and that part of their operations which we think of as being their principal operations, I don't attempt to say

BLEED THROUGH

BLURRED COPY

where one starts and the other stops, I am not intimately acquainted with their operations or with the law, but that part of their operations which down in Texas we think of as being the primary function of Phillips, that is, producing, gathering, processing gas, in the state, I'd say ought not to be under the Federal Power Commission's operation. I have assumed something that doesn't exist, but to the extent that the equivalent exists, I would answer your question. If they had a pipe line to Chicago and were engaged primarily in the transportation of gas through it, I'd say that ought to be under the Federal Power Commission. Just like I say that if Lone Star Producing and Lone Star Gas merged, then the Federal Power Commission should continue the same regulations over the merged company that we now enforce and there is no conflict that I know of.

* * *

[3781]

Q. If the Federal Power Commission has jurisdiction over Lone Star Gas Company in relation to certain of its operations, is there any reason why a like operation on behalf of Phillips should not also be under the jurisdiction of the Federal Power Commission? A. Let me try this answer. I don't ask, the Railroad Commission of Texas doesn't seek, for Phillips to be treated any differently from any other company under similar circumstances. We are not here intervening or whatever we did to get into this case, in behalf of Phillips, and it is not fair to tie Phillips to us or us to Phillips. I imagine we have three or four lawsuits with them going on at the present time, and we

don't stand in identical position here. There is actually probably more parallelism with the position the Federal Power Commission is in and the Railroad Commission, than between the Railroad Commission and Phillips. We are intervening because we object to a principle, not that it has been accomplished or that we have any belief that the Federal Power Commission is going to step in, but we did feel that the time was proper for us to come and voice to you, not that we thought you were threatening to do it, but voice to you, our concern if the

[3782]

Federal Power Commission should step into these fields and we are not doing it in behalf of Phillips. We do the same thing in behalf of—if you were trying it on Humble or Magnolia, or the littlest independent, and our position would be the same, and we don't wed ourselves to all the stands Phillips takes and certainly won't feel it fair for them to be in any way held responsible for any statements or admissions I would make or any other witness for the Railroad Commission, so my final answer is, we don't seek for Phillips to be treated any differently from anybody else. We do earnestly hope and trust that the production and gathering of gas in the state will not be subjected to regulations by the Federal Power Commission.

* * *

[3785]

Q. You said something this morning, Mr. Murray, about the fear and panic that sometimes overcomes individuals

BLEED THROUGH

BLURRED COPY

when a matter is set down for hearing, and at the same time in another connection you stated that there was reluctance and even refusal on the part of some large producers of gas or large—yes, large producers of gas, to make sales or deliveries of gas to an interstate pipe line in the East Texas Field, I think we were talking about at the time. Do you recall that? A. Yes. I didn't intend to be specific as to the field, because that has been true all over the state.

Q. Yes. Well, now, do you believe, as a member of the Railroad Commission, that reluctance or refusal on the part of individuals to make sales should be so considered that it would govern the exercise by the Federal Power Commission of regulatory authority which it has? I mean, in other words, a sitdown strike by the industry should not be a deterrent to the carrying out of obligations established by statutes, should it? A. No, the fact that the fear of Federal Power Commission encroachment causes failure to prevent waste of gas shouldn't, I didn't mean to imply that simply because

[3786]

some operators are scared of the Federal Power Commission you ought to just close up shop and not do anything. The question was whether or not this could cause further waste, and I answered in the affirmative that it could, a further encroachment, advancement, extension of the Federal Power Commission authority. I think simply the Federal Power Commission carrying on the functions that are — well, I am about to draw a conclusion myself. I don't mean to do that.

Q. That is all right, go ahead. A. If you carry it on the functions that in my judgment are necessary and needful in the best public interest, there needs to be no conflict with the state regulatory authorities and no reason for this fear we are talking about. I don't expect you, because some people are scared of you, to close up shop. But I did answer in the affirmative that any advancement, any reaching out, to the fields at least in our opinion, the Federal Power Commission, if you should step in that field, which I have no belief you would, then I did agree with the question that it would greatly enhance the fear and greatly interfere with our accomplishment of conservation.

* * *

[3791]

Q. You do admit and recognize, do you, that gas is on short supply right now in Texas? A. Large quantities of gas conveniently located is definitely on short supply. At least, we've got so very much of it committed, dedicated, to these out of state pipe lines that we can't find it for our industry here in Texas. The legislator made a speech in the Texas legislature last week decrying that situation. Here these industries couldn't find the gas. He said what does our Railroad Commission do? They sit up and look at the window. We were castigated for failing to take a stand. What could we do? Would it do us any good to come up here and protest to the Federal Power Commission or could we issue an order saying don't take the gas out of Texas, we need it here? The only answer I know is let everybody compete for it and if it gets in short supply, the price will go up and that will encourage us to find more of it.

BLEED THROUGH

BLURRED COPY

Q. You admitted there must ultimately be an end to the gas supply? A. There ultimately will be an end to the oil and gas supply. It is a finite quantity. When that end comes depends on the development because up to now we have been hustling and

[3792]

and finding reserves by keeping pace with our rate of consumption. If every foot of gas ever to be discovered was now discovered, then we could sit back and say, oh, we'd better lock this up, save it for our needs or Wisconsin's needs or so forth, but we know we'll find a lot more gas, and so the freedom of these companies to get out and hustle on their own and find gas and sell it where they can get the most for it is what makes this economy in America click, and that is how come American companies here have found so much oil and gas and have been the principal cause of finding it abroad, because they were free to work, and you get a condition like you have in Mexico or any other country of the world where you have all these federal regulations and restrictions and you don't find any gas. They fix the price low, but they don't sell any because they don't find any to sell.

That, substantially, is my philosophy on this thing, and I am unpopular in Texas just as I might be unpopular in Washington here, because I take the stand we oughtn't to try to stop this export of gas, even though I possibly have as much vision and have been pointing where our industrial future lay as long as any one. I have been telling what we could do with gas, that Texas could be one of the

most popular states in the nation and could have the brightest industrial future of any area in the world if we do keep our gas, and still I'm sitting looking at the window they say down in Texas while we run this gas up to Detroit and Chicago and Wisconsin. We'll have to go

[3793]

pick our fuel up off the prairie some of these days and we'll be a bankrupt state when the gas is going up there, yet I don't know of any way within American system of free enterprise to keep the people of Wisconsin from having our gas when they come down and buy our gas, and I think it is fundamentally wrong for a plant to come down here and want Texas industry and want the gas—by golly they ought to have the right to do it.

Therein is our whole protest on this thing, Texas is a tremendous state and if there is any particular favoritism, any presumption of it, for Phillips, I want to disclaim that. We don't want them to be treated any different from anybody else.

* * *

[3798]

Q. And that gas is processed through what plant, the Crane Plant? A. It is the Crane plant, yes, sir. It is the sourest gas we have in Texas, so we are awfully proud to get it utilized.

Q. Yes. The utilization of that gas was made possible primarily by the construction of these interstate pipe lines, is that right? A. I think I can answer yes either way. I was volunteering about McElroy. So if I talk specifically

BLEED THROUGH

BLURRED COPY

about it, there was no other market for gas from McElory, save the

[3799]

El Paso Natural, and so if it hadn't been for the El Paso Natural, an interstate pipe line, at this time there would not exist any market for that gas. I want to pay full credit for that, and that same is true of a good deal of the sour casing-head gas that is being utilized in West Texas. El Paso takes a larger percentage of casing-head gas than any other company, and if it were not for that interstate pipe line and for their willingness to take casing-head gas, unless—I mean they did it willingly, we might have done it through order, but if it wasn't for their facilities a lot of the casing-head gas we are currently saving in East Texas, would be still flared. Did I pay good enough tribute there, because I have it in my heart to do it there?

Q. The point I was making was not that the interstate pipe line has any glory coming to it but it is just a question of this casing-head gas finding a market since it must be produced in connection with oil. The point I was making with that generally there was no other market for that gas from the Crane plant, that I know of? A. I know of none either. And that is just as extreme example that I can think of. Some one might say why are you letting all this West Texas casing-head gas go out of the state and clear to California, why didn't you save it for Texas industries. Here is the opposite of

[3800]

that argument I was presenting a while ago. That gas was

being flared. So you see, you have to look at this thing from both sides to see the whole picture.

* * *

[3822]

Q. Is that true? Couldn't you permit the allowables in the Texas-Hugoton without regard to the allowables in other

[3823]

gas fields in Texas? Isn't this treated as a separate unit by itself just as if it was a separate state? A. That was the point I tried to make yesterday and this morning and it may have seemed I was going rather far afield in how we did oil. We are headed towards doing the same thing in gas that we do in oil, and have soon, and I'd like to try and give everybody full notice of that, we don't want to suddenly do it, we are trying to do it gradually, very soon we will pay no attention to the demand for a particular field, we'll just add up the total demand for gas from the state and distribute it to all the fields in the state, and the reason I keep coming back to oil, is because you can see in oil what we are going to do in gas, we've got to do in gas.

* * *

[3835]

BY MR. TULANE:

* * *

[3836]

Q. At this time, then, you cannot name a field to which Michigan-Wisconsin could go and bargain for eleven billion

BLEED THROUGH

BLURRED COPY

cubic feet of gas? A. You can go to any field and bargain for it. I cannot give you a field where you can get the gas at your price.

Q. Within the realm of economic— A. (Interrupting.) It is economic for you to go over to the Panhandle field. You are right there, adjacent to you.

Q. Is your opinion based on your knowledge that there

[3837]

are eleven billion cubic feet of gas a month available there? A. There is a whole lot more gas than that available. I don't know whether you'd get it or somebody else would get it.

Q. Is there that much gas on the market, at the present to be bargained for? A. There is much more than that gas on the market. Now, I don't know whether you'd get it or not. That is where I can't say who is going in this free competition to get the gas. I'll try to answer your question. I can't name, what is it, eleven billion a month, eleven billion in a package that is just sitting there waiting, nobody taking it, just waiting for you to come and ask them would they like to sell it to you. I can name some fields where there is gas that nobody is taking and it wouldn't be practical in my judgment for you to go after it, and I know there is many times eleven billion a month produced in the Panhandle field. That is available to somebody.

Q. Is it not true that the available production down there is all being marketed right now? I am referring specifically to the West Panhandle. A. It is bound to be. That has to follow. That is what we allow to be produced is what is being marketed.

BY MR. SPARKS:

Q. And if the market demand, Mr. Murray, was increased,

[3838]

then the allowables would be increased commensurately, would they not? A. That is right. If you go in and nominate for additional gas in the Texas Panhandle we'll raise the allowables up, but you may not get it. It may go to these other people. We don't say, fellows, you all have to give Michigan-Wisconsin eleven billion feet. We total up what everybody wants and then it is up to everybody to hustle for it to get it. That is a pretty vicious game. This competitive system is pretty hard-boiled, and it kind of works hardships sometimes. Lots of times we think we'd a lot rather have somebody leading us by the hand and telling us what we want and what should be paid for it, but in a free economy it doesn't work out. I take no objection to price controls in a time of emergency like now. I'm ready for them to put price controls on anything. But outside of emergency I don't think anything should be controlled in price where there is freedom of competition for it. I think the consumer benefits mostly there. Did I ever answer your question? No, I do not know where I can guarantee you you could get eleven billion feet of gas, but if you could go into the Panhandle field and show a demand for more gas we would increase the allowable from the Panhandle field but we wouldn't tell anybody that they had to sell it to you.

BLEED THROUGH

BLURRED COPY

[3839]

Q. Then they'd have to build sixty to seventy miles of pipe line of the same type as the one going up north in order to connect that gas? A. Unless other facilities already existed. We have done a lot of assuming. I haven't said we are going to cut you off from the Texas-Hugoton. I don't see why we would presume that, but if the Texas-Hugoton field is producing more gas than it can produce without wasting, or if it is producing more than the fair share of the total market and because Texas-Hugoton is producing so much there is gas being flared elsewhere in the state that could reasonably be made available to the market—remember, we had an illustration a while ago of Company A, and Producer B. Company A was flaring the gas and the purchaser was taking the gas well gas from the field. I said we could cut down on the gas well gas production so that they'd have to take this flare gas and if this doesn't exist, the whole situation of any trouble, then, with regard to this is an assumption. If there were an oil field right close at hand where a lot of gas was being flared, casing-head gas, and because you preferred to get your gas from Phillips in Texas-Hugoton and Phillips preferred to sell you their Texas-Hugoton gas instead of flaring gas over here, we'd step in and say you can't take it out of Texas-Hugoton. I have amply, to the best of my ability illustrated

[3840]

why I think that is in the best interest of everybody, but I also have not meant to imply that anything is going to happen to it, but if we have authority to run this state

in the best interest of the consumers of Texas and the nation, we have to have authority to tell where gas can be produced and you can't feel you have a vested right and can also require us to allow whatever you want to be produced from the Texas-Hugoton, whether that fits in with preventing physical waste or correlative rights or not. Maybe you can, but if you can, then there is a serious conflict with our authority.

* * *

[3854]

BY MR. SPARKS:

Q. What do those separators do? A. That is to extract the liquid content.

Q. Condense it? A. Yes, sir. There are two reasons, it is not advisable for that liquid to go in the pipe line, and the other reason is we order it done because the royalty owner is entitled to his share of those liquids and we make them put separators on gas wells, they recover the liquid, run it through a liquid meter, measuring the volume and then throw it right back into the common stream and take it on to the gasoline plant but that gives you a pressure amount of how much liquid is recovered. I didn't answer your question because I can't say where production stops. On a gas well, like I guess in Texas-Hugoton, that gas is dry and everything is all right to start with. You can take it out of the well, I guess, and run it right into—

BY MR. McALLISTER:

Q. (Interrupting.) A gasoline plant? A. Yes. And there could be cases where it would be in such good shape where you wouldn't need to run it through a

BLEED THROUGH

BLURRED COPY

[3855]

gasoline plant, you can put it in the pipe line.

Q. That is thrue over in the Monroe field? A. So production would stop there when you got it out the well, but then there are cases where you run it through three stage separation and on through a gasoline plant and you haven't got it ready for the pipe line until you run it through all of that. I consider all of that part of the production operations until you get it ready to deliver into a pipe line, until it is in marketable condition.

Q. Where does gathering begin, then? Is that after you get it produced? A. Yes, sir; although we generally look to the gathering as part of production.

Q. You take a proposition of this kind, you take a gasoline plant and supposing the gas is delivered into a interstate pipe line and is moved for a distance in the interstate pipe line and then is processed. Under those circumstances where would gathering be completed? I mean do you have gathering and then you have transportation and then does it go back to gathering again while it goes through the gasoline plant? A. We have a lot of cases where you process the gas, you gather it, you run it through your lease separators and you gather and run it through a field plant.

Q. A gasoline plant? A. That is right. Then you put it into a pipe line and

[3856]

run it on down away and run it through another plant. I consider, and there has never been any occasion for us to make a legal decision, so I don't presume to speak with

any authority, so I presume, I consider, when you get it through the first processing plant, that that is when the production and gathering ceased, then if you do more processing down the line that is part of the transportation system.

Q. When you flare gas, has it been processed before it is flared? A. Some of it.

Q. I mean flare out of a gasoline plant? A. That has been processed, yes, sir.

Q. Where does the processing end? Do you have to carry it a given distance after you get it processed before you have completed it? A. The residue, where we have had large flares has been on the residue line from a gasoline plant.

Q. Yes. A. We have some flaring that way right now. That gas has been completely processed and it is ready to go in the pipe line and part of it does go into the pipe line but at times the pipe lines can't take it all and so it is flared, so the gas that was flared is just as thoroughly processed as the gas that went into the pipe line.

[3857]

Q. I show you paragraph 8 of Exhibit 135, and I call your attention to the words, the paragraph starts:

"That approximate 21.941 million cubic feet of natural gas that is being flared daily from the gas processing plant here involved has already been gathered and processed".

Now, gathering according to that statement, it seems to me, is employed as being completed as the gas goes in

BLEED THROUGH BLURRED COPY

the gasoline plant? A. Not as it goes in, after it has been through the plant. This is in the Fullerton plant. The gas there is gathered to the plant, processed and gas being flared. Part of it was flared, and part of it was put into El Paso's lines.

Q. Yes. A. As I previously stated, I make no attempt to legally define all these things.

Q. No, I am asking practically from your thinking. Frankly when it goes through the Fullerton plant, whether out a flare line or into El Paso's lines it has to be processed and gathered and El Paso takes over on the transmission. Then you can't separate processing and gathering, is that right? I was trying to distinguish between the terms process and gather. A. I think of gathering as bringing it into the plant

[3858]

and processing is what you do to it.

Q. That is what I thought also. A. They are all tied in together.

Q. They are all tied in together. Just as transportation goes on beyond, they are tied together. A. That is right. One acts right after the other.

Q. You gather it, process it and then transport it to market? A. That is correct, although you sometimes produce it, and of course, it is all part of production and you do some processing right on the lease.

Q. That is right? A. Then you do some more gathering.

Q. That is right. A. Then you do some more processing.

Q. Then you may transport it and do some more processing? A. That is right.

Q. If, as a matter of fact, gas is assembled in one field and it is transported across country to a gasoline plant in another field— A. (Interrupting.) Excuse me. Possibly we have a specific illustration in this Shafter Lake we have been talking about. I didn't mean to interrupt but that might give you a specific illustration to question about.

[3859]

Q. That is right. A. It is produced in Shafter Lake and taken over to Fullerton to be processed.

Q. That is right. That may be transportation from one field to another as distinguished from gathering? A. Well, of course, gathering is transportation. I am a little at a loss—if we define the terms and I could tell you within those definitions which we were doing, but I have never stopped to define—in the process of gathering, you have to transport.

* * *

[3861]

Q. I appreciate that, and I understand that, Mr. Murray. In discussing the question of conservation this morning you referred to the price of gas. Were you considering there the price that the operator got at the wellhead? A. Yes, sir. I might possibly include the price that is paid after casing-head gas has been processed.

Q. The price of gas X the gasoline or included in the gasoline? A. The point I was making, particularly on

BLEED THROUGH

BLURRED COPY

casing-head gas, it is whether the price is high enough to justify the gathering and processing of the gas and so I've got to look to more than just what might be paid at the well-head, but whether or not the price paid when it leaves the processing plants is high enough to pay for all these costs—

Q. (Interrupting.) What you really mean is this, that the amount that the producer and the gatherer would realize out of their total operations in collecting gas through a gasoline plant and making it available for market? A. Could I add the producer, the gathering and the processor?

Q. The producer, gatherer and processor?

[3862]

A. Yes, because it costs something to process casing-head gas particularly if it is sour. They used to say it was completely impractical to do it, but we have gotten the price down plus a little extra price that it is beginning to be practical to sweeten sour gas. So there is what I am talking about, if we are speaking specifically of casing-head gas, it is the price paid for the gas after it has been gathered and compressed and put into a marketable condition.

Q. You have to include in that to determine the economic factors you have under consideration the amount received also from the liquid content out of the gasoline plant? A. Yes, sir.

Q. It has to be the gas as sold in its final shape after being sweetened plus the dollars realized from the liquid product? A. That is right. If you greatly increase the

liquid price. I don't mean greatly, if you increase the liquid price, that will do just as much good where there is substantial liquid to be recovered as increasing the gas price. It all works together.

Q. Isn't it a fact that where there was any sizable field at all in the past, even though it was sour gas, that that was gathered and processed for the recovery of the

[3863]

liquid content only, even though the gas was flared afterwards? A. I think you said isn't it a fact that where there was —

Q. (Interrupting.) Sizable quantity. A. Would you restate your question?

Q. Wherever there was any sizable quantity of gas being produced, casing-head gas, as a matter of fact, it was gathered through a gasoline plant, the liquid recovered and the residue gas flared? A. There were plants built to recover liquids.

Q. Well, there were great numbers of them, were there not? A. Yes, sir; and in that case they were built to recover liquids. There were a great many other fields where it wasn't feasible to recover the liquids. They just flared the gas out in the field, so we had two problems, one of getting the gas flared at a gasoline plant, that had to be further processed, dried, sweetened in some cases, and compressed. Now, the gathering had already been done to get the liquid out of it, so that wasn't necessary to take care of the gathering in order to get the gas marketed. In the other cases, the gas was still scattered throughout

BLEED THROUGH

BLURRED COPY

the field and you had to conclude the gathering of it. Does that answer your question?

[3864]

Q. It does in one sense. There is one more point, and that is sometimes the inability of the producers in the field to get together on a gasoline plant was the cause of the flare in the field and other times the volume wasn't sufficient to justify gathering and processing, is that right? A. That is right, yes, sir, we have had delays by arguments simply on who is going to get to build the plant.

Q. What would be your practice in that regard today if they couldn't get together on building a plant? A. Well, they can shut the oil field in and have plenty of time to work out their differences or views.

Q. And you sometimes do that, but it is only after a long delay that you get around to doing that. You try to work it out amicably before you do it? A. That is the position we take. They think we are hasty sometimes, but it seems to us it has been long and there is plenty of time to leisurely work it out.

Q. But you don't know of any case, do you, where the Federal Power Commission, by anything it has done specifically in relation to a company that is a natural gas company and also produces gas in Texas, where the Federal Power Commission by order, regulation or effort, as far as you are concerned, has sought to interfere with the free

[3865]

exercise and power that you feel you should have over the production of gas in Texas? A. No, sir. If I might add, I'd like to amplify on that, because the question might be raised why we are intervening here. We don't think the Federal Power Commission is going to take an action to interfere with our authority, but if we didn't come and frankly discuss these things, just like, until I was relieved, I was fearful of your statement about dedicated reserves—that is why we are here. We are under no real apprehension that you will. We don't, for example, haven't had, any conflict with you in regulating, say, Lone Star Gas Company, and United Gas Company. If you were to be holding a hearing on whether or not Lone Star producing company or Union Producing Company were under your jurisdiction, we'd be pretty concerned, because that is something in our field, and we'd be right in here intervening in order to tell you our concern.

Here Phillips is to us like United Producing Company or Lone Star Gas Producing Company. To you, apparently, it is like United Gas Pipe Line or Lone Star Gas Company, so we have a difference of views, and I haven't looked into the details of the operations of the organization, but I think at least I try to make my point clear about what we are concerned about—

Q. (Interrupting.) Yes, sir, I think—

[3866]

A. (Interrupting.) And I had the good example with United and Union. We'll take Union and you all take United.

BLEED THROUGH

BLURRED COPY

Q. But what I'm saying is if there is such an operation, except that instead of having two separate companies they do it all in one, necessarily the Railroad Commission of Texas and the Federal Power Commission must deal with the same corporate entity, each in their own sphere? A. That is correct. Again I think if you will combine Lone Star Producing Company and Lone Star Gas Company, then we'd expect you to keep on regulating that portion of it that is doing the same thing that Lone Star Gas is now doing, and we'd expect, without interference—we wouldn't expect to interfere with your authority there, and we'd expect without interference to do what we have been doing. I have been repetitious there, but I am anxious for you and the Federal Power Commission to understand our presence in this hearing.

Q. By that same token, you are not concerned with the authority we exercise over Panhandle Eastern Pipe Line Company, are you? A. I know of no area of conflict that has developed so far.

Q. Or Canadian River Gas Company or Texoma Natural Gas Company?

[3867]

A. No, sir.

Q. They are producers, large producers? A. This possibly is improper and please cut me off if it is.

Q. It is perfectly all right, go ahead. A. Is the Federal Power Commission regulating the production of Canadian River and Panhandle from their wells?

Q. No. We are leaving that to you. We never have

worried about it. We thought you were doing it, and now maybe we are wrong, I thought, when everybody kicked and said we were interfering—but when I get down here and talk to you, we found you were doing your job we assumed you have been doing, and we find out you are doing a good job. A. Thank you, sir.

Q. There is no thought on our part to do anything in the future than what we have done in the past. A. To specifically answer your question, I know of none, and your answer to me helps further my knowledge of the case, and I know of no conflict we have had on those companies in the particular question.

* * *

[3868]

BY MR. TULANE:

Q. Mr. Murray, are there any conservation conditions which you know of right now in the Hugoton Field which would cause you to cut down on the Hugoton allowable substantially below the nomination? A. No. I'll qualify that to the extent that they are not now getting what they nominate.

Q. I know that, but you don't know— A. (Interrupting.) I don't know of anything that would cause us to change the allowable they are now getting, but I do want to point out we are not giving them what they nominate.

[3869]

Q. Your first answer was correct? A. No, I had to qualify it. You said was there any conditions that would keep them from getting what they nominate. If they are

BLEED THROUGH

BLURRED COPY

getting now substantially what they nominated, then I know of no condition to change it.

Q. From your present knowledge in the foreseeable future can you think of any such conditions which would arise which would cause a substantial cut-down on the allowables in the Hugoton Field? A. Subject to the general qualifications I made earlier, I can say no.

BY MR. SPARKS:

Q. To what general qualifications do you refer? A. Of how Texas Hugoton will have to in times in the future gear itself to its fair part of the total Hugoton supply and its fair part of the total Texas supply. We have come, I think, to this question "to the immediate future" and I know of nothing in the immediate future that would change the present picture.

* * *

[3872]

MR. TULANE: Today, Your Honor. If you will recall, the witness stated in substance that when a monopoly condition arose, he did not think it desirable, that he recognized that it was essential, that it be subject to government regulation. I believe you'll all recall that testimony.

PRESIDING EXAMINER: Is that your testimony as you remember it, Mr. Murray?

THE WITNESS: That is my recollection. I was speaking relative to the gas companies as domestic sales and pointed out that where a company had exclusive, shall we say, monopoly if that word is permissible, in a certain city, like Lone

[3873]

Star used to have in Dallas, there is no other company there, then I considered that that company had to be regulated by state authority, if it was purely an intrastate operation, and I would consider the same would apply on an interstate operation, that it would have to be regulated.

I didn't agree that it was desirable, I said it was undesirable and necessary.

• • •

[3919]

JACK K. BAUMEL

resumed the stand, and having been previously duly sworn, was examined and testified further as follows:

Direct Examination (Continued) by Mr. Crenshaw

• • •

[3933]

Q. I'll ask you to state whether or not if in considering the additional production for the seasonal demand it was found by the Commission that to take the gas at the increased rate would affect the reservoir and the potentials of the well, what, if anything, would the Commission do in those circumstances? A. Well, in these fields we are talking about, for instance, the Panhandle field or the Hugoton field or any other field in which there is no water drive, most of the proration we are doing is not primarily on waste, so much as protection of correlative rights, so in

BLEED THROUGH

BLURRED COPY

fields of that type where there is a solution drive field or gas drive field there is very little waste from high rates of production. It is only in these water drive gas fields that we fix the M. E. R. as the allowable even though the market demand may exceed many, many times the efficient rate, the Commission's orders will reduce that take to the actual efficient rate of production for the field.

Q. In the event that the purchaser made nominations for an increased demand on the production in that particular field and there was no possible way to get it under the allowables after they were set, what, if anything, would be done by the

[3934]

purchaser of the producer in order to supply that demand? A. Well, I might state this, that in accordance to the statutes for a reservoir which produces both sweet and sour gas, the statute specifically states that we, when allocating the allowable for these fields, like the West Panhandle field and the Texas-Hugoton field, we are restricted by statute to limit the allowable to 25 per cent of the open flow, so that if the market demand would increase for any of these fields to a point where by granting the allowable to each well according to the allocation formula it fixes the allowable for a well to exceed 25 per cent of the open flow, we automatically cut that back to 25 per cent, so we may reach a point in the Hugoton field or the Texas-West Panhandle field where the market demand may reach a point where it would cause all wells to be restricted to 25 per cent of the open flow. Then in that case, why, you never would be able to meet your market demand, and it would force

the pipe lines or purchasers either to interconnect with other fields in the state or not meet the market demand.

[3935]

Q. When you say interconnect, what do you mean by that, Mr. Baumel? A. I meant by that that if all the purchasers had certain market demand and they couldn't meet it from their connections, or any other connections in the field they just couldn't meet the demand or if they needed that gas they'd have to lay lines to other parts of the state to buy that additional gas.

* * *

[3939]

Q. Where there is a field from which casing-head gas was being produced, and well head gas, well head dry gas, that is, and the casing-head gas is taken to one of these processing plants and from there the processing takes out of the casing-head gas the liquid hydrocarbons and leaves

[3940]

sweet or sour gas, and that gas is flared, the residue gas is flared, what, if anything, can the Commission do with reference to regulatory powers? A. Do you mean in a field where there is a commingling plant which takes in casing-head gas and dry gas at the same time?

Q. That is correct. A. In that case, in some instances we wouldn't permit any flaring of gas and if gas would be flared in that plant, he'd, the operator, would have to show us first that he is utilizing all the gas from dry gas that is being produced but under the Commission's power on the

BLEED THROUGH BLURRED COPY

flare gas orders, we would insist they cut the take from these gas wells to utilize all the casing-head gas and every bit of gas that comes out from that plant.

Q. Is there a field up there in the Panhandle and West Texas that you can think of where that kind of situation exists? A. Well, a condition like that might exist in the West Panhandle field, in which there are oil wells being produced also, and if there is a plant in the Panhandle field which takes in casing-head gas and dry gas well gas of course, that example is not so good, because all the casing-head gas is utilized in that field and no gas is flared in that field, but you take, for instance, the

[3941]

Goldsmith Field or any other field in which there are gas cap wells and casing-head gas, that condition would exist.

* * *

[3948]

Q. I'll ask you, Mr. Baumel, if price has any relationship to such a situation as we have been talking about, and if so what is it, that is, the price of gas. A. I think that was already discussed yesterday by Mr. Murray. The price of gas is depressed you are going to have little conservation. If the price of gas is high you will have very little trouble in carrying out your conservation laws.

[3949]

Q. Under a low price, a depressed price, after the producer had gone to the expense of constructing the plant to take care of the casing-head gas heretofore having been

flared, would he or not have a tendency, a strong desire, to go and produce solely from his gas wells rather than to utilize his casing-head gas under the expensive processes?

MR. McALLISTER: I object, Mr. Examiner. I'll withdraw the objection. Let Mr. Baumel answer it if he can.

* * *

[3950]

MR. CRENSHAW: The very same question was asked of Mr. Murray and nobody objected to it at all and we have asked the same question of Mr. Baumel to see if he had an opinion about it. We are just wasting time with all kinds of ramifications. Let's go ahead.

MR. McALLISTER: Maybe the questions are what are wasting time.

PRESIDING EXAMINER: Go ahead.

THE WITNESS: I would say that it would put a producer in a dilemma if we ordered him to go ahead and build a gasoline plant and lay a gathering system to pick up this casing-head gas which was being flared and being utilized for legal purposes and later on a price was established at a low figure where he couldn't operate the gathering system and the plant, then naturally waste would be created and he would be forced to flare the gas and take the dry gas well gas.

BY MR. CRENSHAW:

Q. While we are on the subject of price, I'll ask you this question, do you have any opinion as an engineer and on the basis of your experience in dealing with regulations and

BLEED THROUGH

BLURRED COPY

administration of the laws of Texas with regard to gas, do you have any opinion about price and its relationship to conservation? If so, I wish you'd explain it.

MR. McALLISTER. I object. I think the witness has answered this question about three times this morning.

PRESIDING EXAMINER: You are now speaking of his experience?

MR. CRENSHAW: Yes, sir.

PRESIDING EXAMINER: In connection with the application of the conservation rules and laws?

MR. CRENSHAW: If he has any opinion about the relationship, if any, between price and conservation. If he has an opinion about it, I'd like for him to explain it.

MR. McALLISTER: I object, Mr. Examiner. The witness—

PRESIDING EXAMINER: (Interrupting.) The objection is overruled.

THE WITNESS: From an engineering standpoint, you cannot deny that economics has a great deal to do with the drilling of wells or the producing of wells.

PRESIDING EXAMINER: We aren't concerned in an argument here. What we are trying to find out if we can as I understand it is the experience of the Commission with respect to such situations.

THE WITNESS: The experience we find is that if an operator comes before the Commission for field rules and the Commission adopts a spacing rule of 40 acres or 160 acres and then the price of gas is despressed, we tell him he has to drill the wells on

[3952]

160 acres or on 40 acres but he can't afford to drill them under the price of gas. The question then comes in that waste will take place and the natural resources will not be recovered unless he drills those wells at 40 acres or 160 acres. He is forced under depressed gas prices to drill them on 640 or a thousand acres.

BY MR. McALLISTER:

Q. Where has that ever occurred? A. It hasn't occurred yet, but—

• • •

[3953]

BY MR. CRENSHAW:

Q. That is one instance. Are there any other instances you can think of where price has any relationship to conservation?

• • •

MR. CRENSHAW: I wanted him to develop from his own experience, I mean I wanted him to express an opinion based on his own experience, in any regard he can think of, whereby he would have an opinion as to whether price had any relationship to conservation. He told us about insofar as spacing was concerned, whereby he had an opinion how it would affect, price would have some affect or relationship to conservation. What I want him to do is tell of any other phase of conservation whereby he thinks or has an opinion about price in relationship to conservation. If he hasn't any more he can say. If he does, why, he can say that.

• • •

BLEED THROUGH

BLURRED COPY

[3954]

THE WITNESS: Another case would be in the premature abandonment of these marginal gas wells or the drilling of submarginal acreage, marginal acreage, where an operator couldn't afford to drill his needed wells if the price of gas was depressed or would be forced to abandon his so-called marginal gas wells.

[3955]

BY MR. CHENSHAW:

Q. Is there any other situation where price would affect or relate to conservation? A. The other one I have already answered was casing-head gas.

Q. Based upon your experience have you any opinion which would show to us whether or not under a situation where there is a low price for gas that the incentive to develop and produce among the drillers and producers and those who look for oil and gas, is that incentive raised or lowered in accordance with the price of the product? A. Well, I believe that past experience in the drilling of gas wells which have increased over the period of the last ten years, that shows when the price of gas was low we'd have few gas wells being drilled. As the price of gas has increased we are drilling more and more gas wells.

Q. Would it be your opinion that a higher price for gas would tend to increase the incentive for the further development of gas? A. Yes, sir, that is my opinion.

Q. Would you have any opinion with reference to whether the higher price for gas the more possible it is for the Commission to make further use of casing-head

[3956]

gas, stopping the flaring of gas? A. Yes, sir, that is correct.

Q. I believe you heard Commissioner Murray during the last few days say that due to the fact the price of casing-head gas was so low that that was one of the reasons why it had been flared or vented to the air for a long number of years.

MR. McALLISTER: I object, Mr. Examiner. I don't think this witness is called upon to appraise the value of Mr. Murray's testimony.

PRESIDING EXAMINER: I agree with that.

MR. CRENSHAW: He heard him testify.

BY MR. CRENSHAW:

Q. Would you agree with that or not.

PRESIDING EXAMINER: Go ahead. He isn't here.

THE WITNESS: My answer wouldn't be predicated on whether he was here or not. I agree with him one hundred per cent in what he says.

BY MR. McALLISTER:

Q. And you don't disagree with him? A. I don't disagree with him either.

MR. TULANE: Mr. Crenshaw, may I interject a question here?

MR. CRENSHAW: Yes, surely.

BY MR. TULANE:

[3957]

Q. Why should the low price of casing head gas cause flaring? A. Well, I believe the Courts in upholding our orders specifically said that in cases where it would be

BLEED THROUGH

BLURRED COPY

uneconomical where we forced them to conserve by virtue of confiscation that we didn't have the power to force an operator to conserve gas where we force him into confiscating his property; if the price of gas was so low that he couldn't afford to build a gathering system on his lines, I doubt very much whether our orders would have been upheld in Court.

BY MR. McALLISTER:

Q. How about the Crane plant, there is a gathering system where the gas was being flared to the air? A. Not all the wells were connected to the plant.

Q. Not all of them, but 66 and 2/3 per cent of them or better were. A. Yes, sir, but they have showed before the Commission that the gas was so sour you couldn't get into any line.

Q. You didn't have a line, did you, so the price didn't have anything to do with it, you didn't have an outlet? A. No, but when we asked them to put it back in the ground they couldn't afford to.

Q. That is right, that might be, but that was just a

[3958]

condition that nobody had any control over? A. That is correct.

Q. I mean you can't blame all the ills of the industry upon price? A. Well, that is correct, but price has a great deal to do with conservation.

* * *

[3973]

Q. If the conditions ever warrant it, the Commission

may lower the ratio, in which event it would help to utilize more gas in the production of the oil, is that correct? A. I don't understand you.

Q. If they lowered the ratio, made more— A. (Interrupting.) If the Commission lowered the ratio that would require less gas to be produced with the oil.

Q. And if that were so it would mean more gas could be used out— A. (Interrupting.) No, if the Commission reduced the gas-oil ratio for the field it would mean that more of the gas would be left in the reservoir and not be produced with the oil.

Q. I see. Then that wouldn't affect the amount of gas that reached the market at all, is that correct?

[3974]

A. It would tend to cut down your supply of casing-head gas from that field into the plant.

Q. If that is so, explain how that would result? A. Assuming that the field was existing at a six thousand to one ratio, more gas would be produced with oil through the gasoline plant and processed and be put in the El Paso Natural Gas transmission lines. If the Commission reduced the gas-oil ratio to two thousand to one, it would reduce the gas to be produced from that reservoir in that proportion and there would be less gas going into the transmission lines.

Q. So the setting of the gas-oil ratio does have some effect on the gas that is put on the market, is that correct? A. That is correct, yes, sir.

* * *

BLEED THROUGH

BLURRED COPY

[4018]

RICHARD R. SPURRIER

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Chumbris

Q. What is your name, please? A. Richard R. Spurrier.

Q. Will you please give your address? A. Santa Fe, New Mexico.

Q. Do you hold an official capacity with the State of New Mexico? A. I do.

Q. What is that official office? A. State geologist and by reason of that office secretary of the Oil Conservation Commission.

Q. How long have you been state geologist? A. Since 1945.

Q. How long have you been a member of the State Oil Conservation Commission?

[4019]

A. For the exact same length of time.

Q. And you are also secretary of the Commission? A. Yes, sir.

Q. Will you please state your qualifications of office, please? A. I have a degree in petroleum engineering from the New Mexico School of Mines. It is called a Batchelor of Science in petroleum engineering. I have stated these qualifications before the Federal Power Commission before.

I will be glad to carry these as far as necessary but in the interest of time I think I can cut them short.

* * *

[4021]

Q. Will you relate the duties of your office in a general manner? A. As a matter of fact, the Oil Conservation Commission is composed of the Governor, the Land Commissioner and the State Geologist. As a matter of practice, the State Geologist spends all of his time in the administration of the Oil Conservation Commission, and completely supervises administratively all the functions of the Commission with the consent and advice of the other two members of the Commission.

* * *

[4051]

BY MR. CHUMBRIS:

Q. Mr. Spurrier, will you state the objects and purposes of the State Oil Conservation Commission? A. The purpose of the Oil Conservation Commission of New Mexico is to conserve oil and gas in New Mexico.

Q. What action does the Oil Conservation Commission take toward carrying out that program? A. The New Mexico Commission is the state regulatory body for oil and gas and as such we supervise the drilling, completion and production of all oil and gas wells.

Q. The Oil Conservation Commission, when was it inaugerated into the State of New Mexico? A. It was established by statute in 1935.

Q. And the Conservation Commission has been oper-

BLEED THROUGH

BLURRED COPY

ating on through the years to the present time? A. Yes.

Q. Will you please explain how often the Oil Conservation Commission meets in the State of New Mexico? A. The Commission meets informally at any time it cares to, but it has regular meetings once a month.

Q. And they are in the City of Santa Fe? A. Yes.

Q. But there are occasions when they may hold a

[4052]

special meeting in other parts of the state? A. No, the Commission does not meet anywhere except in Santa Fe.

Q. How does the Commission carry out its program of conservation?

Give us several illustrations. A. Well, in a general way, the Oil Commission in supervising the production and drilling practices, the Commission keeps acquainted with the current practice, best practices in the oil and gas fields and in that way we try and do, I think, eliminate practically all waste, that is possible.

[4053]

Q. Could you state whether the program of conservation has retarded waste considerably in the last few years? A. Well, I think it has. In the interest of time and in the fact that several Commissions have testified before, I might say that we operate in a similar manner, and that with the—well, I might call it off at that, unless you want a specific instance.

Q. The Oil Conservation Act, as it now stands in the State of New Mexico, how does that compare with the

Oil Conservation Acts of her sister states? A. We were fortunate to benefit by some of the mistakes of the older producing states, such as Texas and Oklahoma and we, at the time our law was passed by the legislature, it was considered as a model law. At least two states have largely copied our law, I believe it was Arkansas and Mississippi who copied New Mexico's statutes, not entirely but substantially.

Q. Could you state whether the price of gas has any relation to conservation?

MR. TULANE: Mr. Examiner, may I object to that and ask first of all if he has an opinion and second what his opinion is based on?

PRESIDING EXAMINER: Yes, I think that might be developed.

THE WITNESS: Shall I answer Mr. Tulane's question?

BY MR. TULANE:

Q. First, do you have an opinion?

[4054]

A. Yes, I do.

Q. On what is that opinion based? A. My experience in New Mexico.

Q. I mean what is the factual background? I mean what situations have you run into? A. I can remember very well when I worked in Lee County, that is the southeastern corner of New Mexico, in 1940. As I remember the general current price for gas was two cents per Mcf. Seventy-five million cubic feet of gas, which I have seen coming out of one flare per day at that time was worth

BLEED THROUGH

BLURRED COPY

$9,000 per day at 15 cents in the Ohio market. It was obvious to someone that if it was worth that much in Ohio there must be some way to enhance the value of it in New Mexico, and you can see that that is what has happened. I should have used California, because all of the gas exported from New Mexico, practically all of it, finds a market in California.

In those days I couldn't give you an exact figure, but I know there were Millions of cubic feet of gas flared in New Mexico every day. The last official figure that we have compiled shows that that figure has been cut by 80 some per cent. There is only a small, 18 per cent or less gas being flared now as there was in 1940 or even five years ago.

BY MR. PERDUE:

Q. Pardon me a moment there. Do you mean 18 per cent of the total produced today or 18 per cent of that which was flared

[4055]

in 1940? A. Less than 18 per cent of the casing-head gas that is produced today is flared.

MR. PERDUE: Thank you.

BY MR. SPARKS:

Q. And in 1940 substantially all of it was? A. That is right.

Q. And in addition to that which was flared in gasoline plants there was untold millions of it that was flared at the wells that wasn't even gathered and taken into a plant and wasn't measured? A. That is correct.

Q. And doesn't appear in any official reports, is that right? A. Yes, sir. One official estimate arrived at five hundred and some million per day, but that was an estimate.

Q. It wasn't even worth metering it? A. Sir?

Q. It wasn't even worth metering it and flaring it? A. That is right.

BY MR. CHUMBRIS:

Q. The Oil Conservation Commission does it have the authority for well spacing? A. Yes, it does.

Q. Will you explain the procedure under which you act

[4056]

there? A. The statute specifically states—I don't see the section—that the Commission has the authority to fix spacing, not only the authority but the responsibility.

Q. And in practice how does that work? A. In practice the Commission calls a hearing any time a new pool is discovered and at this hearing the pertinent matters as to the reservoir characteristics are brought out and the Commission establishes spacing.

Q. And your program as to well spacing, is that part of your conservation program? A. Yes, it is.

Q. What other acts does the Oil Conservation Commission put into practice under the laws and rules and regulations as part of its conservation program? A. Well, the Commission enforces proration of oil and it is now encumbent upon the Commission to enforce proration of gas, which we have not yet done because we have just taken testimony to outline the pools, gas pools. We also have

BLEED THROUGH

BLURRED COPY

the statute behind us on the matter of ratable take, and we enforce that.

Q. Will you explain your procedure there? A. Well, ratable take is so simply done that it is just a matter of putting the amount that each well may produce into the proration schedules, and each well may only produce that which

[4057]

is authorized in the schedule which is the official monthly schedule of the Oil Conservation Commission.

Q. Does the Act provide for common purchaser? A. Yes, it does.

Q. Does that apply to oil, to gas as well as oil? A. Yes, it does.

Q. What do you consider to be the maximum effort of conservation of gas in the State of New Mexico? A. I don't know if I understand your question.

Q. What I'm driving at is when would you be satisfied that the State of New Mexico is getting the most out of its conservation program, is that by getting the most production out of the oil and gas wells? Is that what you would consider— A. (Interrupting.) No, we do not get the most that we can, that is, we do not produce all the wells at their maximum rate. As Mr. Baumel put it this morning, we try to produce at maximum efficient rate, although we do not have exactly the same type of hearings and conditions for setting allowable as does Texas.

Q. Then maximum efficient rate would be what you are pointing to under your conservation program? A. That is right.

Q. How long as the production of gas been going on in the State of New Mexico? A. Practically since the first production of oil, and

[4058]

that was in 1911, I believe it was.

Q. When has it been extensively produced in the State of New Mexico or when did the operations begin to rapidly grow? A. Do you mean the production of gas or—

Q. (Interrupting.) Yes, gas. A. Well, New Mexico's large production of gas is wet gas, so-called, or casing-head gas, which is produced incidentally with oil. I don't know if I understand your question, but since 1945 the production of oil has risen from about 98,000 barrels per day to about 140,000 barrels a day, and the production of casing-head gas, I believe, has risen about on the same percentage basis.

Q. How about the production of gas from the wells? A. The production from dry gas wells, the amount is something I do not know, and I am not familiar with how it has increased in the past 10 years.

Q. Is New Mexico, in view of the development in the San Juan region, considered a prospective, great prospective, producer of gas? A. Yes, it is.

Q. And that has been a rather recent development, hasn't it? A. Yes.

Q. Will you state why the development is just beginning to become a fact rather than in years passed?

[4059]

A. If you are speaking of the San Juan Basin, the reason

BLEED THROUGH

BLURRED COPY

there is because there has never been a market for gas, that is, any sizeable market, and because there is very little oil produced in the San Juan Basin and very little gas is produced with that oil.

Q. Does the price of the gas that they receive have any effect on that production?

MR. TULANE: Just a minute, Mr. Examiner. I don't understand that question. I object to it.

BY MR. CHUMBRIS:

Q. Does the price that the producer receives affect the progress of producing gas in that particular area? A. Well, I believe that it does. However—

MR. TULANE: (Interrupting.) I think that is an answer to that question. Now ask him how if you want to.

MR. CHUMBRIS: Do you object?

MR. TULANE: I object. I can't understand what you are driving at. I am sorry if I am stupid but—

PRESIDING EXAMINER: (Interrupting.) All right, he has answered the question.

BY MR. CHUMBRIS:

Q. What was the answer to that question? A. I believe that it does.

Q. You believe it does? A. Yes, sir.

[4060]

Q. Will you explain how it affects it?

MR. TULANE: Mr. Examiner, I am going to object again. What price are you referring to, the price at the wellhead, the price at some market and if so, what market?

MR. CHUMBRIS: I'm talking about the price to the producer.

MR. TULANE: Where? At the wellhead?

MR. CHUMBRIS: That is right.

MR. TULANE: Are you asking him whether the price at the wellhead will spur greater exploration and production, is that what you are driving at?

MR. CHUMBRIS: That is what I am getting at, yes.

MR. TULANE: All right.

MR. PURDUE: That is objected to as immaterial, Mr. Examiner, and certainly outside the issues of this case.

MR. PERDUE: It is too basic.

PRESIDING EXAMINER: Too what?

MR. PERDUE: It is too basic. Naturally if the price of the products goes up people try to produce it.

PRESIDING EXAMINER: I think that is true, but we've had the same question here.

MR. CHUMBRIS: That thing has been brought out for the last four days. I hope it didn't startle you gentlemen.

MR. PERDUE: No, but it is a basic fact that when the price of any products goes up people try to produce that product. I know it has been going over four days—

[4061]

MR. SPARKS: (Interrupting.) I think it is worth driving home again, Mr. Examiner.

PRESIDING EXAMINER: Beg pardon?

MR. SPARKS: I think it is worth driving home again.

PRESIDING EXAMINER: Well, is it driven now or do you want to carry on?

MR. PURDUE: Also exploration for gas or oil is not conservation, Mr. Examiner.

BLEED THROUGH

BLURRED COPY

THE WITNESS: That is your opinion.

MR. CHUMBRIS: That might be your opinion.

MR. SPARKS: Ask him that question.

MR. CHUMBRIS: I was stopped when I was going in that direction.

BY MR. CHUMBRIS:

Q. Will you answer the question Mr. Purdue just— A. (Interrupting.) I don't know if it was a question, but as I understand it the idea has been advanced that the use of gas or exploration for gas is not conservation. As we understand conservation it is the wise use of natural resources.

BY MR. PERDUE:

Q. Did you say wise use or wide use? A. Wise, w-i-s-e.

BY MR. SPARKS:

Q. Mr. Spurrier, you can't conserve it until you find it, can you?

[4062]

A. That is right. We have millions of tons of coal up in the San Juan Basin which was reserved by one administration and it still is.

MR. PURDUE: Mr. Examiner, as long as it is in the ground it is conserved, that is obvious.

PRESIDING EXAMINER: Go ahead.

THE WITNESS: I think it hinges on the definition of a term. We are talking about using gas here, so I say our conception of conservation is wise use of gas.

[4063]

BY MR. CHUMBRIS:

Q. I'd like to get your opinion on whether you feel that in carrying out your program of oil conservation, whether the element of price is related to conservation of gas. A. I think I partially answered that question. I didn't carry the thing through. In 1940 the price of gas in Lee County was about two cents. It approximates somewhere between four and five now, and I gave you the figures on the difference of the amount of gas being flared. I think that was basic, too.

Q. What effect does price have on abandonment of wells? A. Simply this, that if you get a higher price for gas, if a producer receives a higher price for gas, he can afford to produce a well longer and to a lower abandonment pressure.

Q. If there is a great abandonment of wells, does that affect your conservation picture? A. Well, naturally it does.

Q. Has your Commission ever exercised the power to fix the price of gas at the well head? A. No, it has not.

Q. Could you state whether in your opinion your Commission has the power and the authority under the law of

[4064]

the State of New Mexico and under the rules and regulations to fix a price. A. Well, my opinion is that it can. However, it is a moot question because it has never gone to court in New Mexico, and we have not done it. However, we did have a case where price was mentioned in conjunction with a ratable take situation. In this case which

BLEED THROUGH

BLURRED COPY

came before the Commission about a year ago for hearing, four or five wells in a pool were not even showing a ratable take, and naturally the owner of the well who was not selling gas or was selling a small amount brought the case up to the Commission as against the owner of a well who was selling several million feet a day. The case was continued for lack of evidence, and at the next hearing dismissal was asked for and granted by the Commission because in the meantime the operators had arrived at a common price and a common amount which is ratable take.

Q. In other words, that is one instance in which by amicable arrangement the Commission did not come to the decisive point of deciding whether they were going to have the authority to fix a price or not? A. That is right.

Q. Mr. Spurrier, could you state in your opinion that if the Federal Power Commission should assume jurisdiction over the producers and gatherers of natural gas,

[4065]

whether that fact would conflict with the regulatory power of the Oil Conservation Commission?

MR. PERDUE: I object to that question, your Honor. The assumption in there that the Federal Power Commission may take jurisdiction over producers and gatherers of natural gas has no bearing in this case.

MR. CHUMBRIS: I thought that was the issue of the case or one of the serious issues of the case.

MR. PERDUE: The issue in this case is whether the Federal Power Commission has jurisdiction over Phillips Petroleum Company, not all the producers and gatherers of natural gas.

PRESIDING EXAMINER: We are concerned here with the application to Phillips Petroleum Company.

MR. SPARKS: (Interrupting.) I know, but the thing is whether Phillips is a producer and then if it is subject to jurisdiction and that is a proper assumption to make.

MR. CHUMBRIS: Otherwise, Mr. Examiner, the State of New Mexico would not have been permitted to intervene in this case. We are not interested, as the other states have stated, in the battle between the Federal Power Commission and the Phillips Petroleum Company as a company. Our interest in the case is whether the Federal Power Commission will assume jurisdiction over producers and gatherers of gas in the State of New Mexico, which the Supreme

[4066]

Court has stated and even the decisions of the Federal Power Commission have stated that the state regulatory body has that jurisdiction, so to us, this particular question and as stated in the Interstate Natural Gas Case that jurisdiction will not lie with the Federal Power Commission so long as you can show a conflict between the Federal body and the state regulatory body.

PRESIDING EXAMINER: There is no conflict as far as this case is concerned, except insofar as the Phillips Petroleum Company is concerned.

MR. CHUMBRIS: Well, Phillips Petroleum Company is one of the companies that is regulated by our state regulatory body.

PRESIDING EXAMINER: I assume that to be the case, I know that to be the case, or else you probably

BLEED THROUGH
BLURRED COPY

wouldn't be testifying to this extent.

MR. CHUMBRIS: That is right.

* * *

[4071]

Q. You have stated that the Oil Conservation Commission has certain power over the conservation program such as well spacing, is that correct? A. Yes.

Q. Assume that the Federal Power Commission attempted to take jurisdiction over producers and gatherers of gas as to well spacing, would that conflict? A. It certainly would.

MR. PERDUE: Once again we have the Federal Power Commission taking jurisdiction over all producers and gatherers.

MR. CHUMBRIS: That is the issue in the case.

PRESIDING EXAMINER: That is another one of those assumptions, many of which have been made.

MR. PERDUE: I think if we made the assumption, sir, that the Federal Power Commission would find it had jurisdiction over the Phillips Petroleum Company, I'd have no objection, but he assumes they have jurisdiction over all producers and gatherers. That is not in issue.

PRESIDING EXAMINER: All right.

* * *

[4073]

Q. Mr. Spurrier, assuming that the Federal Power Commission

[4074]

takes jurisdiction over producers and gatherers of natural gas in the State of New Mexico, as it affects the Phillips

Petroleum Company, would that conflict, and assuming that that taking jurisdiction as to these various phases of regulation such as well spacing, proration and other means of conservation, in which the State of New Mexico already, as you testified, adequate and competent authority to act and which they have acted, would you consider the action of the Federal Power Commission in such a case to conflict with your state body?

MR. PERDUE: I object, Mr. Examiner. May we have the question read on that—

PRESIDING EXAMINER: (Interrupting.) Read the question, please.

(The question was read by the reporter.)

PRESIDING EXAMINER: Do you understand the question?

THE WITNESS: Yes, sir, I do.

PRESIDING EXAMINER: All right, go ahead.

THE WITNESS: And the answer is yes.

BY MR. CHUMBRIS:

Q. Assuming that the Federal Power Commission would take jurisdiction as to the fixing of prices of gas as it affects producers and gatherers of natural gas in the State of New Mexico and as it affects the Phillips Petroleum Company's operations in the State of New Mexico, that it would be in conflict with the regulatory body of the State of New Mexico with the Oil Conservation Commission?

[4075]

MR. PERDUE: I object to it on the same grounds, Mr. Examiner.

BLEED THROUGH

BLURRED COPY

MR. CHUMBRIS: It is the same question.

MR. PERDUE: It is the same question and it has the same thing in it.

MR. CHUMBRIS: Your Honor, I don't think you ought to be required to rule each time to each question. He objects, you have already ruled the question is permissible, so why doesn't he state his objection without arguing the same time.

MR. PERDUE: You couldn't possibly have ruled that question is permissible, Mr. Examiner.

MR. TULANE: That question is double also, you put in one type of producer and Phillips and you didn't show they are both in the same status.

PRESIDING EXAMINER: Read the question.

(The question was read by the reporter.)

PRESIDING EXAMINER: The question obviously isn't complete.

MR. CHUMBRIS: Would you read that back to me, the question as I put it.

(The question was read again by the reporter.)

BY MR. CHUMBRIS:

Q. Just would it be, that would take care of it?

MR. PURDUE: Same objection, Mr. Examiner, on the same ground. It is certainly asking a whole lot of this witness to undertake to express an opinion on that. There is no foundation laid.

[4076]

MR. CHUMBRIS: There certainly has. He has testified that the State Oil Conservation Commission has author-

ity to do certain things to conserve gas. He has also testified that he considers that the fixing of a price is related to conservation. He also has testified that he feels that his regulatory body could fix price of gas at the wellhead of producers and gatherers of the natural gas. All right, he has set that up. Now all he is asking to do is if the Federal Power Commission tried to do the same thing that they are doing would it be in conflict. I don't see where that isn't in line with the other questions that have been asked here for the last three or four days.

MR. PERDUE: I don't believe Mr. Spurrier testified the Commission, of which he is a member, had the power and authority in the State of New Mexico, had the authority to fix the price.

MR. CHUMBRIS: He did state that, you probably weren't listening, Mr. Perdue.

MR. PERDUE: No, I was listening.

MR. PURDUE: He said it was a moot question.

MR. CHUMBRIS: That is right, he said the court itself had not decided the question because it has never been presented to the court. He further stated that the closest instance of price fixing was the situation where the one party filed the complaint and before the case was determined the other parties realizing what would take affect, went home and worked the thing out within the time that was permitted for the continuance of the

[4077]

case. That was all in the record, gentlemen.

MR. PERDUE: He never definitely stated—

BLEED THROUGH

BLURRED COPY

PRESIDING EXAMINER: (Interrupting.) Just a minute. To begin with I think the question could be reframed and perhaps a lot of confusion and a lot of argument might be avoided.

As I understand it, what you are asking the witness is that assuming that the Federal Power Commission fixes the price of gas to producers and gatherers of the gas in New Mexico, would that conflict with the regulatory authority of the State of New Mexico?

MR. CHUMBRIS: That is right. The only thing is when I made that long question the last time and I paused for a minute I might have used the word that instead of would be and we changed it to that extent.

PRESIDING EXAMINER: Answer the question now.

MR. SPARKS: The Examiner's question?

PRESIDING EXAMINER: Yes.

THE WITNESS: The answer is yes.

* * *

[4078]

Cross-Examination by Mr. Perdue

* * *

[4085]

Q. Therefore, I believe it is safe to presume, is it not, sir, from your answers that the Southern Union Gas Company and the El Paso Natural Gas Company in all respects and in every way possible, and as you can check through your agents, that those companies comply with the New Mexico Oil Conservation Commission's rules and regula-

tions promulgated under the authority given to you by the New Mexico Legislature and entered in this proceeding as Exhibit No. 145, is that not correct, sir? A. I think so.

Q. Do you know, sir, whether the Southern Union Gas Company, owns leases within the State of New Mexico? A. I think that they do. I am quite sure they do.

Q. Do you know whether they own and lease wells within the State of New Mexico? A. Own and lease wells?

Q. Own or lease wells. A. They do own wells and they lease land.

Q. Lease land upon which wells are located?

[4086]

A. That is right.

Q. Thank you. And they own and operate and utilize in their operations lines which may be classified as field lines in the State of New Mexico? A. I don't know what you mean by field lines except that they are gathering lines which connect to a main line.

Q. And they also own and operate and utilize in their operations the main lines to which the gathering lines are connected in the State of New Mexico? A. That is right.

Q. And the same is true of the gasoline plants? A. I don't follow your question.

Q. Do they also own and operate and utilize in their operations gasoline plants within the State of New Mexico? A. Does Southern Union?

Q. That is right. A. Yes, they do have some gasoline plants.

* * *

BLEED THROUGH BLURRED COPY

[4088]

Q. Mr. Spurrier, are you aware of the fact that El Paso Natural Gas Company owns or leases well, field lines and gasoline plants within the State of New Mexico?

• • •

[4089]

THE WITNESS: No, I don't need the question read, I don't believe. I think the question is does El Paso own or lease wells, gasoline plants and field lines and so on and so forth. The question cannot be answered categorically yes or not. Is that what you wanted me to do?

BY MR. PERDUE:

Q. I'd just like you to answer the question that's all. A. I'm sure the El Paso Company does own some production, that is, some wells, although they are not required to furnish the contracts to us to show that. As I remember their testimony in a former case before the Federal Power Commission, it was shown they do own wells. I am not sure they own any gasoline plants. I think they perhaps are either constructing one or will, and, of course, the matter of field lines I am sure they do own some. How many, I don't know. How much, I don't know.

Q. I show you Exhibit 146-F, Mr. Spurrier, in this proceeding, operators monthly report which has been introduced into evidence by the State of New Mexico, and ask you if it is within your duties as a member of the Oil Conservation

[4090]

Commission of the State of New Mexico, to inspect or in any way see those reports as they are filed with the Oil Conservation Commission? A. It is not.

Q. It is not your duty? You never see those reports, then, as they are filed by the companies that fill them out and file them with the Commission? A. Occasionally I see one but I make no practice of checking form C-115, I have a statistical department that does that.

Q. Do you know, sir, what company in the State of New Mexico owns the gasoline plants which are known as Jal plant No. 1, Jal plant No. 2 and Jal plant No. 3? A. I believe Phillips owns plants so numbered.

Q. Thank you.

BY MR. CHUMBRIS:

Q. Are you sure whether they do or do you just think they do? A. I think that they do. I remember at least two of their plants. I don't know the exact locations of those plants, except that they are in Lee County.

BY MR. PERDUE:

Q. In your tenure as a member of the New Mexico Oil Conservation Commission has there been called to your attention any instance of a conflict between the applicability of rules and

[4091]

regulations of your Commission and the rules and regulations of the Federal Power Commission insofar as they apply to the operation of the El Paso Natural Gas Company? A. Did you say has any conflict been called to my attention? The answer is no.

BLEED THROUGH

BLURRED COPY

Q. You stated, sir, you did not know whether the Southern Union Gas Company was such a gas company as would be classified a natural gas company as that term is used in the Natural Gas Act. If Southern Union Gas Company were a natural gas company within the meaning of that term as it is used in the Natural Gas Act, would it not be reasonable to assume that if a conflict did occur between the applicability of the rules and regulations of the New Mexico Oil Conservation Commission and the rules and regulations of the Federal Power Commission, such would have been called to your attention? A. I think you lost me on that question.

MR. PERDUE: May we have the question read.

PRESIDING EXAMINER: Read the question.

(The question was read by the reporter.)

A. I think probably it would.

BY MR. PERDUE:

Q. Has any such conflict been called to your attention? A. If and if and if, yes.

Q. Has during the tenure of your office any such conflict been called to your attention?

[4092]

A. I don't know that Southern Union is a natural gas company, or are they subject to your jurisdiction, they sell all their gas intrastate.

Q. Well, I'll tell you, Mr. Spurrier, they are. Southern Union Natural Gas Company is a natural Gas company under the jurisdiction of the Federal Power Commission as is El Paso. A. Then the answer to both your questions is no, I have never heard of any conflict.

* * *

[4097]

Q. Mr. Spurrier, Exhibit No. 145 in this proceeding, which is the rules and regulations of the New Mexico Oil Conservation Commission, Page 9, Rule 104, the rule deals with, as its title indicates, "well space, acreage requirements for drilling tracts". Do you have a copy of that before you? A. Yes.

Q. You have stated that Southern Union Gas Company and

[4098]

El Paso Natural Gas Company to the best of your knowledge do own and lease property upon which wells have been drilled within the State of New Mexico. Could you tell me now, sir, whether those companies have complied to the best of your knowledge with Rule No. 104? A. Yes, they have.

Q. And to the best of your knowledge there has never been a conflict between the compliance by those companies of that rule and the compliance by those companies with the rules of the Federal Power Commission? A. I have no knowledge of any rules of the Federal Power Commission about spacing.

Q. No, but if there had been a conflict that would have been called to your attention would it not, sir? A. Yes, I am sure it would.

Q. Has such conflict been called to your attention? A. No.

Q. Mr. Spurrier, you stated in answer to a question asked of you by Mr. Chumbris, that the State of New

BLEED THROUGH BLURRED COPY

Mexico had the Common Purchaser Act, is that not correct? A. I think it does, yes.

Q. Could you tell me if Rule 902, "Ratable Take", on page 24 of Exhibit 145 is the rule that the Oil Conservation Commission of New Mexico has promulgated under the Common Purchaser Act?

[4099]

A. Rule 902 says "Ratable take". It is entitled ratable take. I don't know if it deals with common purchaser or not. Common purchaser is defined in the statutes, I might say.

Q. May I call your attention to rule—

MR. SPARKS: (Interrupting.) It is also defined in the rules, if I am not mistaken.

BY MR. PERDUE:

Q. Rule 802 on page 23 is "Ratable Take, Common Purchaser", and applies to oil does it not, sir? A. Yes.

Q. And Rule 902 on page 24 seems to be ratable take although it does not say commor. purchaser—

MR. SPARKS: (Interrupting.) Yes, it does.

THE WITNESS: It does in the second line.

BY MR. PERDUE:

Q. It does? A. Yes.

Q. Would you say, then, after the opportunity you have had to look at the rule now that that is the rule promulgated by your Commission under the Common Purchaser Act? A. Yes, it is.

Q. It is. And it is a fact, is it not, that the rule goes on to provide that the provision of this subsection shall not apply to purchasers of casing-head gas from oil wells?

MR. SPARKS: Purchases

[4100]

MR. PERDUE: What did I say?

MR. SPARKS: I thought you said purchasers.

BY MR. PERDUE:

Q. "To purchases of casing-head gas from oil wells?" A. I forget how you phrased the question, but that paragraph 2 is "to purchases of casing-head gas from oil wells".

Q. And Rule 902 does not apply to such purchases? A. State that again, please.

Q. Rule 902 does not apply, then, to such purchases, is that not correct? A. That is right.

Q. Have you ever been aware, sir, or has it ever been called to your attention that there has existed or does exist a conflict between rule 902 of the rules and regulations of the New Mexico Oil Conservation Commission, as that rule applies to the operations of the Southern Union Gas Company and the El Paso Natural Gas Company within the State of New Mexico and the rules and regulations of the Federal Power Commission? A. Has the conflict ever been called to my attention?

Q. That is correct. A. No, it has not.

* * *

[4103]

Q. Sir, you made the statement upon your direct examination that the wisest use of gas is conservation? A. That is right.

Q. As to the word "use", the way you used the word "use", were you thinking there of the end result, the end use, of the gas? A. Yes. I was thinking whether it is to

BLEED THROUGH

BLURRED COPY

be flared or to be used for commercial purposes or domestic purposes.

Q. You weren't thinking, then, of the use of the gas, say, El Paso Natural Gas Company transports the gas to California, you were not thinking of the way the consumer in California used the gas? In other words, you mean if the gas is used to be transported by El Paso, that is a wise use? A. Yes.

Q. And that would be conservation because the gas is not blown or flared in the air? A. It is not wasted.

Q. Now, sir, you said that between the years 1940 and 1941, the waste of gas in the State of New Mexico had been greatly reduced and you cited as— A. (Interrupting.) No, I did not say that.

Q. You did not say that? A. I did not.

Q. Didn't you say that the amount of gas—

[4104]

A. (Interrupting.) I said between 1940 and 1950.

Q. From the years 1940 to 1950 that the waste of gas in New Mexico had been greatly reduced, is that not correct? A. That is right.

Q. And you cited as the reason or what in your opinion was the reason for such reduction, and such a great measure of conservation of the gas, that the gas had risen in price. I forget the amounts and they are not material. A. That is true.

Q. In that interim, has the Oil Conservation Commission of the State of New Mexico taken any measures to aid in the conservation of gas, natural gas, in the State of New

Mexico? A. Do you mean—if you mean shut down orders and that sort of thing, no, we haven't.

Q. You haven't promulgated any rules or regulations which to your mind would aid or enhance the measure of conservation? A. Yes, we have.

Q. You have? A. Repressuring plants, pressure maintenance plants.

Q. Would you not say, sir, that in your opinion maybe the measures the Oil Conservation Commission of New Mexico had taken in the years from 1940 to 1950 might share a little

[4105]

bit in bringing about this great advance in conservation in the State of New Mexico? A. Yes, I think we have helped conservation in New Mexico.

Q. Along with the two-cent rise in price, the Conservation might also be given a little credit? A. Yes, sir.

Q. In fact, if we get right down to it, the efforts of the Conservation Commission might be given most of the credit? A. No. I think the market and the price are the two important things.

Q. The fact that the El Paso Natural Gas Company came in and took large amounts of casting-head gas in that period would you not say, and I think we assuredly would, that the efforts of the New Mexico Conservation Commission greatly aided in El Paso coming in and taking that gas to market which had been flared before? A. I would say greatly. I would not say we helped.

Q. Helped a great deal? A. No.

BLEED THROUGH

BLURRED COPY

Q. Helped to some extent? A. Right.

Q. Rather than a primary reason for the great percentage of gas which is now conserved in the State of New

[4106]

Mexico, we find that the efforts of the New Mexico Oil Conservation Commission are at least as great as if not greater than the rise in price, is that not correct, sir? A. Would you restate your question. It seemed to me very similar to one you just asked before.

PRESIDING EXAMINER: Will you read the question, please.

(The last question was read by the reporter.)

A. No, I wouldn't say that was correct.

BY MR. PERDUE:

Q. If the El Paso Natural Gas Pipe Line Company had been willing to take the natural gas from New Mexico at the two cent rate, you said applied in the year 1940, would not that have been just as great a conservation measure? A. If they had been willing to, yes.

Q. So it wasn't the price at which El Paso took the gas, it was the fact that they did take the gas? A. No, that is not correct. The price very materially had a lot to do with it, because as soon as El Paso wanted to contract for the gas, there was a competitive market and the price came up, and when the price came up, the gathering systems could be laid to gather this flare casing-head gas.

* * *

[4110]

Q. Well, the question and the questions leading up

to it was this, I asked you if you knew that the Federal Power Commission regulated certain rates of the El Paso Natural Gas Company, and you indicated you did. Then I asked you if, in the course of regulating those rates, has it ever been called to your attention that a conflict arose between such regulation by the Federal Power Commission and the applicability of the rules and regulations of the New

[4111]

Mexico Oil Conservation Commission. A. The Federal Power Commission does not regulate the price of gas to El Paso in New Mexico.

Q. That was not the question, sir.

MR. PERDUE: Will you read the question, please.

(The last question was read by the reporter.)

A. No conflict has ever been called to my attention, no.

* * *

[4113]

Q. You stated that to the best of your knowledge, no conflict arose by virtue of the fact that the Federal Power Commission regulated certain rates of the El Paso Natural Gas Company? A. That is right.

Q. And you also said then in answer to a question of Mr. Sparks' that those certain sales took place outside the borders of the State of New Mexico and now I'm trying to determine whether you think that the reason no conflict has arisen is merely because of the fact that the sales took place outside the borders of the State of New Mexico. A. I don't think that has much to do with it, no.

Q. In other words, if the same sales took place within the borders of the State of New Mexico, you do not think

BLEED THROUGH

BLURRED COPY

[4114]

that by virtue of that fact, bringing the point of sale back within the borders of the State of New Mexico, there would ipso facto arise a conflict? A. No; I think that is a pretty hypothetical question.

Q. Hypothetical, but proper. A. As a matter of fact, I don't know whether it would or not.

* * *

[4115]

Q. And if the El Paso Natural Gas Company were a purchaser and producer of natural gas in the State of New Mexico, and the operations of the two companies as purchasers and producers were similar in nature and extent and scope, and if the El Paso Natural Gas Company —and it is—were a natural gas company within the meaning of the term as it is used in the natural gas act, and if by virtue of being such a natural gas company no conflict arose between the jurisdiction of the Federal Power Commission and that of the New Mexico Oil Conservation Commission, would it not be reasonable to assume that no conflict would arise if the Federal Power Commission took jurisdiction over such activities of the Phillips Petroleum Company?

* * *

[4116]

PRESIDING EXAMINER: Do you understand the question? Do you think you can answer it?

THE WITNESS: Yes, sir, I think I understand the question. I think he means that if Phillips Petroleum Company is a producer and a purchaser and if El Paso is also

a producer and purchaser—now, if those are the only two things we are taking into consideration and if that is so, why, sure, if one company comes under the F.P.C., so should the other one, if those two things only are true.

That is basic, I think. What is fair for one must be fair for the other one.

* * *

[4117]

Q. You stated in answer to a question asked of you by Mr. Chumbris that the price at the wellhead in your opinion had an effect on conservation of natural gas within the State of New Mexico, is that not correct? A. I stated that it did?

Q. Yes. A. Yes, I did.

Q. Would you say that the price of the market wherein natural gas is sold also has an effect upon the conservation? A. I would stick to my original contention, that the price of gas at the wellhead is very definitely a factor in conservation.

Q. Well, this— A. (Interrupting.) The person who sells the gas at the wellhead doesn't know or care what the price of gas is somewhere else.

* * *

[4122]

Q. To return to your statement that the price at the wellhead affected conservation, what is there about the price and what effect do you feel it has on conservation? A. Well, it just means that casing-head gas will be gathered

BLEED THROUGH

BLURRED COPY

instead of flared. Now, that is simply and basically all it means.

Q. You mean that if the price is high enough that the gas will be gathered instead of flared?

Q. You answered yes, did you, to my last question? A. Yes, I did.

Q. I think you shook your head and the reporter can't get that. A. Oh, I'm sorry. Yes.

[4123]

Q. Is it not that when you say the price is sufficiently high to bring about greater conservation, in other words, if the gas is gathered instead of flared, do you not mean that there is sufficient profit for that to be done? A. There must be profit as an incentive for any venture.

Q. But I mean sufficient profit. Do you mean the price is high enough so that it would pay— A. (Interrupting.) To lay the gathering lines to pick up the flare gas, yes.

Q. And that is why the price at the wellhead affects conservation, because it affects conservation in that if it is too low to make it nonprofitable to lay the gathering lines, they will not be laid, and if it is high enough to make it profitable to lay the gathering lines, they will be laid? A. That is correct.

* * *

[4125]

BY MR. McALLISTER:

Q. I have one other question. In that relation to price which you say affects conservation, according to your theory

the higher the price the greater the conservation, does that follow? A. Within limits, yes.

Q. What are the limits?

[4126]

A. Well, I don't know. I don't know exactly what you mean. If you mean for me to define the exact price of gas—

Q. (Interrupting.) No, not the exact price, but what would be—you stated to Mr. Perdue a minute ago that the price had to be sufficiently high to provide for the laying of gathering lines and allowing something for the producer over and above his actual costs, is that right? A. Yes, sir.

Q. If you were to take all of these costs, gathering lines and drilling and what-not, and you allow him all of that and some return on his total investment, is that a sufficient price? A. Well, if you are talking about six per cent I don't think it probably is.

Q. What per cent would you suggest? A. I really don't know.

Q. I mean you were very definite in saying that the price affected conservation, and I'm trying to get a measure of price in relation to conservation upon which you based your answer. A. Percentagewise I really don't know.

Q. How much dollarwise then, or pennywise? A. I never laid a system of gathering lines.

Q. I know, but you were very definite in saying that

[4127]

that price affected conservation, you gave it some thought, didn't you? A. Yes, you must make a profit.

BLEED THROUGH BLURRED COPY

Q. But I mean what profit, 20 per cent, 50 per cent, annually? A. I'm not prepared to say. You've got to make a profit or else you don't do such things.

Q. I know, but what profit did you have in mind when you said that, a price sufficient to give them a profit, now, what profit did you have in mind? A. You'd have to go into a matter of the amortization of the pipe you laid and a few other things.

Q. Oh, yes, all of those costs. I have taken all those. He gets that without any question, whatever the proper costs are, amortization, depletion, operating expenses, income taxes, a salary for the man who has to do the job, all of those are expenses, I'm allowing all the proper costs of operation. A. Not being a busines man, I don't know what a profit—

* * *

[4129]

THE WITNESS: I don't think I am prepared to answer the question, Mr. Examiner; as a geologist acquainted that well with finances would probably be a producer instead of a geologist.

BY MR. McALLISTER:

Q. You said the price affected conservation. Let me put it this way, if it was bare cost out of profit, would

[4130]

it aid conservation? A. Would what aid conservation?

Q. A price for the gas at the wellhead or at the gasoline plant, wherever you want to put it, so that you have the gathering lines and the processing plant and its bare costs,

would that aid conservation? A. I doubt that it would. There has to be an incentive.

Q. Now, how much of an incentive? A. Profit is the incentive. I am not prepared to say.

Q. Well, let me put it in another way, you don't want to answer that question with the limited knowledge that you have? A. That is right.

Q. And your thinking hasn't carried you that far, you just want price? A. Profit.

Q. You want a profit. But you don't know how much profit? A. No, sir.

* * *

[4132]

Q. When you stated in answer to certain questions here this afternoon that price was an aid to conservation, what price was it that you had in mind? A. I didn't have any price in mind. I said just a profit.

Q. Just a profit? A. Yes.

Q. But you don't know how much of a profit? A. I'm sure it varies.

Q. Can you give me some limits? I don't want a figure down to a decimal point, but give me a range. A. I have no idea.

Q. You have no idea of a range? A. No, sir.

[4133]

Q. Pursuing that in another way, is it your concept that a producer, if he can get it, can get the highest price possible for the sale of his gas without limitation? A. That is what I would try to do if I were a producer, yes.

BLEED THROUGH

BLURRED COPY

Q. I mean as a conservation man, you are an official of the State of New Mexico now, and is it your concept, so far as conservation is concerned, that the producer in the state who sells his gas must get the highest price without limitation that he can possibly exact in the sale of that gas? A. That is the way it operates, yes, sir.

Q. And that is what you were speaking for? A. Yes, sir.

Q. And you don't think that there should ever be any limitation upon that highest price that he can get? A. As long as the price is determined in an open market between a buyer and a seller, I think that he should get as high as he can.

Q. And if I have a field or you have a field and it is the only available gas within a limited area, then you or I, in selling that gas, should use our position to get the

[4134]

highest price possible and that is O.K. in the field of conservation? A. I don't think the price should be exorbitant, but I think you should get as high—

Q. (Interrupting.) When does it get to be exorbitant? Who is going to determine that under the theory you have advanced? A. Well, I really don't know.

Q. You don't know? A. No.

* * *

[4144]

JACK K. BAUMEL

resumed the stand, and having been previously duly sworn, was examined and testified further as follows:

* * *

[4178]

Q. Sure. Mr. Baumel, do you get reports on the price of gas in these various fields that are under proration? A. We don't, not in any field except the West Panhandle field.

Q. You get the price on that? A. Under statute, I believe, of 1948, the legislature told the Commission to hold hearings every six months in the West Panhandle to ascertain the price of gas for that field and we do that every six months, and that is the only field in the state in which we do that.

Q. Is it just for the gratification of certain members of the legislature, or do you do anything with the price when you find it? A. We just ascertain it and issue our order setting out—

Q. (Interrupting.) Setting out the price for what purpose? A. My interpretation, that is just my interpretation, of that order, it would be so that any well which is unconnected and if it gets a market for carbon black, why, the carbon black company has to pay that price which is equivalent to the price ascertained for gas into a pipe line.

[4179]

Q. What price is it that you determine there? Is it an average price, the going price or the weighted average or what.

Q. Haven't you sat in on any of those hearings? A. I have sat in on every one we had and I haven't been able

BLEED THROUGH BLURRED COPY

to interpret the statute as to whether we should find the average price, thegoing price or the weighed average or what.

Q. Which do you do, under your orders what do you do? A. Well, the last order we just listed the going price for every company, and we let the operator determine the average price, we didn't determine it.

Q. You didn't determine that? A. No, sir.

* * *

Q. The reason I asked you, that price must be a big help to you in your conservation work in that field, isn't it? A. The only help it would be is we know that the higher the price the more conservation we will have in that we believe that the value of that gas increases and there will be less and less regulation to try and make them

[4180]

conserve it.

Q. Let's take the West Panhandle field. Have you found that to be true? A. On the price we ascertain?

Q. No, I mean the question of as the price goes up you have less and less to do with conservation in that field? A. Yes, sir, we can show you records from way back in 1946 to '50 where as the price had increased there was very little gas being flared. In the early days of the Panhandle field large quantities of gas were wasted, billions and billions of cubic feet.

Q. Was that because of price or because of lack of outlet? A. Well, lack of outlet—

Q. (Interrupting.) You mean you get more outlets as the price of gas goes up? A. Yes, sir, that is correct.

Q. That isn't true, is it? A. Your question, is if you get a bigger price.

Q. (Interrupting.) As the price goes up you get more outlets? A. Well, if you have more outlets you have more competition.

Q. Which was it, the chicken before the egg or the

[4181]

egg before the chicken? That is what it is, isn't it? A. Certainly if you have just one outlet in the field, then the producer is at the mercy of that outlet and he's have to take it whether it is one cent, two cents or three cents or zero.

Q. And by the same token when you swing around the other way, if you have one producer and one pipe line or two pipe lines in a field, the pipe lines are at the mercy of the producer? A. No, not necessarily. You have competition there.

Q. Why, if he has all the gas in the field? A. I don't believe that would be true. There is no one field where we have one producer owning all the field, in fee, or anything else.

Q. I know, but take the Texas-Hugoton, Exhibit 134-A. A. Yes,sir.

Q. Where one producer is in a dominant position, you say that won't effect—now, I am not saying what it is today, but if that was the position in the field and you went in there to buy enough gas for a pipe line— A. (Interrupting) Yes, sir.

BLEED THROUGH

BLURRED COPY

Q. On the order of three and a half, three hundred fifty to five hundred million cubic feet a day. A. That condition does not exist in the Texas-Hugoton,

[4182]

you have more than one purchaser and more than one producer.

Q. I mean look at the figures there where the ratio is three and a half to one. A. Yes, sir, but still with that high ratio of Phillips, they still don't get what they nominate. They are still forced if they need the gas to buy from somebody else.

Q. That might be, but what I'm saying is, if there is only one outlet the producers are at the mercy of the pipe line. You say the reverse is not true? A. In this case there is not just one producer. If Michigan-Wisconsin believes they are at the mercy of Phillips, they don't have to buy from Phillips, they can buy from Kerr-McGee, and Shamrock or go on the West Panhandle and buy gas over there.

Q. As a practical proposition do you think that a pipe line can switch from field to field under the present pipe line set up in the State of Texas? A. Well, I—

Q. (Interrupting): Month to month. Just answer the question, and then I'll let you explain it. A. You want me to say yes or no and you can't answer that question yes or no.

Q. Go ahead and answer it in your own way. I didn't

[4183]

mean to hold you to a yes or no answer on anything. A. If Michigan-Wisconsin had made a contract to take that gas

from Phillips and if they can't get that gas from Phillips and if they need that gas, they'll have to interconnect. Under our proration orders they'll have to do that.

Q. You are arguing for your orders. A. Let's set aside our orders. We prorate oil, if a company can't get their allowable from their own connections, they'll have to interchange and buy from somebody else. The Michigan-Wisconsin line doesn't stop—true it stops in Texas-Hugoton, but it goes through the Oklahoma Hugoton and the Kansas Hugoton.

Q. But as a practical propsition would you tell me how they can get gas in those other fields? A. If it goes through those fields, why, and they can't get from the Texas side, they'll just have to take on connections from those other fields.

Q. But you think that works without consideration to the provisions of the contract? A. I don't see how it would breach the contract, if Phillips, under the regulations of the Texas Railroad Commission can't supply that contract, Michigan-Wisconsin would have to get gas some place else.

[4184]

Q. We are afield from what we started out with. You say if there is one pipe line from a field, the producer is at the mercy of that pipe line? A. Yes,sir.

Q. Those producers can sell that to some other pipe line in another field? A. That is correct.

Q. But as a practical matter, do they have the opportunity? A. They have the opportunity if they want to go out and lay their own lines to some place else.

BLEED THROUGH

BLURRED COPY

Q. Then every producer in the state has equal opportunty to carry his gas to the point where he gets the highest price for it? A. That is correct.

Q. And the same would be true to a pipe line, they could go ahead and extend their lines to other fields? In theory that sounds good, doesn't it, but in practice it wouldn't work? A. Mr. McAllister, eventually that would have to come about just like in oil.

Q. I know, but we are dealing with the present, aren't we? A. Even with the present I can't say what the Commission might do tomorrow, the Commission might get an order out tomorrow and prorate the Texas-Hugoton with the West Panhandle field and in this case Kerr-McGee, Phillips and Shamrock

[4185]

would not be able to get their demand at all from the Texas-Hugoton field.

Q. If you did that you would make that order effective down the road 12 months to give people an opportunity to rectify their operation? A. I don't know whether we would make it tomorrow or six months. Assume they made it in six months. In order for Michigan-Wisconsin to lay line someplace else, they'd have to go through you to get a certificate of convenience and it may take six to eight months from you.

Q. That is right, or maybe Phillips would have to get that certificate? A. I don't know. I imagine if you classify them as a natural gas company they would.

Q. Well, it wouldn't take Phillips any longer than it would Michigan-Wisconsin, would it? A. That is right, and

in that case they still wouldn't be able to supply the contract.

Q. I mean it is a practical proposition. No one is going to lay down any rules just to embarrass somebody? A. No, I'm just saying that that is what the Commission will eventually do. We have been discussing that, and they can get out an order, effective today, maybe effective September 1, I wouldn't know.

Q. But no order of that kind would be very effective if,

[4186]

within that time, due to pipe shortages or one thing or another, the necessary connections were not being made or cannot be made? A. That is correct.

Q. I mean those are problems that would have to be worked out, it can't be an arbitrary order, it would have to be sensible? A. That is right, all our orders have to be reasonable.

Q. When it comes right down to the last consideration your main objective in providing the rules and the allowable from each field is so that as to each producer in the field and each one, each purchaser in the field, they get a fair shake?

MR. SPARKS: Are you limiting your question now or is that as to all fields, Mr. McAllister?

MR. McALLISTER: I'm putting it in all fields. I don't make it that way, but there is no reason why it shouldn't be equally applicable to all fields, as far as I know. I think it will apply equally to one field or all fields.

PRESIDING EXAMINER: Read the question.

BLEED THROUGH

BLURRED COPY

(The question was read by the reporter.)

THE WITNESS: I believe I stated that the Commission in prorating gas prorates to prevent waste or to prevent confiscation of property. In the absence of waste, it is to distribute the allowable ratably so that all wells will get a fair share in the market.

BY MR. McALLISTER:

[4187]

Q. Yes, where there is waste— A. (Interrupting) The Commission will reduce the purchasers nomination of the take of the field to the most efficient rate of the field and distribute it ratably under the allocation formula irrespective whether that M.E.R. meets the market demand or not.

Q. That is right, but I mean so far as the producer or the purchaser— A. (Interrupting) It is distributed rateably according to the allocation for the field.

Q. So that statement I made would apply equally to all fields where you have prorated them? A. That is correct, our orders have to be fair and reasonable to all fields. We can't prorate one field and then using a similar order in another field, disregard the Commission's rules and regulations or allocation formula for that.

Q. Now for getting down to the point, a great deal has been said here about price being a dominant side which favors conservation. Can you give us an example of that in a practical way where you have seen it work? A. I thought you asked me that yesterday and we went over it, but I'll go over it again.

Q. I mean we did go into it a certain amount as far

as flare gas is concerned. A. Yes, sir, and I believe we also went into that insofar

[4188]

as we stated that the price has a great deal to do in premature abandonment of marginal wells and also that drilling of marginal acreage and in in-fill drilling in fields.

Q. You mean between the spacing? A. Yes, sir.

Q. Between normal spacing when the pressure gets down to relatively low pressure? A. Even normal spacing or greater spacing, our spacing orders are minimum spacing rules. An operator doesn't have to drill a well on 10 acres if he has six forty.

Q. No. Is it your position that the price should be such that will permit all this marginal drilling? A. I wouldn't say that the price would permit. I believe the price should be high enough which will be an incentive to the operators to continue to produce these marginal wells to the least economic limit he can afford to and at the same time go back in and redrill or rework those wells which will permit him to produce his gas. I don't know whether it is a high price or a low price. I am saying the price has to be high enough to be an incentive to him to go back in and do that work.

Q. Now, we'll take an ordinary field here, and you could represent it by a block wherein the breaking point between cost and revenue would be represented by a diagonal line drawn from corner to corner. That would be an unusual field, but I mean it is representative of the question. Do get my point?

BLEED THROUGH

BLURRED COPY

[4189]

A. Yes, sir.

Q. If you fix the price which would be at the extreme corner, then that would permit every single well in the field, no matter how far out of the down reaches of a horizon to produce and market that gas without loss, isn't that right? A. Well, you are speaking of fixing the price. I'm not speaking of fixing the price.

Q. No, no; I mean any price that is fixed by reason of the action or normal concepts or competition and so on in the field? A. Well, I'm only speaking in terms of the going price or a competitive price.

Q. Well, that is a competitive price because the fellow says I have this field and I'm not going to sell any gas in it until I get that price which is up at the top corner, which will permit me to recover every bit of gas in here, when I get that I'm going to sell the whole field? A. That is right, if the operator fixes that point, assuming 25c a thousand and he has made a calculation which shows him that under 25 cents he can afford to do all the drilling, that is correct.

Q. That would be what you would say would a price that would assure the maximum in the way of conservation? A. Well, it may and may not.

Q. Well, why not?

[4190]

A. It may be that at 35 cents it might still be better for him to go back and do the additional recovery.

Q. Then you'd want to put it above 35? I want to see how far up the road you want to go on this thing. A. It all

depends when the operator sets that price as to whether he considers secondary recovery and so forth or repressuring or compressing the gas and so forth and so on. If he has taken all that in consideration, then I would say that was all right.

Q. It is a price approaching that which you recommend, as I understand you, as being a price which will aid in conservation? A. Well, it might aid in conservation so far as the particular field is concerned, but as far as increasing our reserves or additional drilling for gas in other fields that price may be low, so you couldn't very well say that this 25c as far as that field is concerned would be a criterion so far as conservation through the state.

Q. Is there— A. (Interrupting) Certainly if gas would be at a dollar a thousand cubic feet it would be an incentive to the present oil operators to quit drilling for oil and start drilling for gas and we would double our reserves and doubling our reserves in gas the price would be long.

Q. I mean if there was that much gas you could double

[4191]

your reserves that would be the effect? A. That is right.

Q. You don't have that assurance? A. We tried to put that exhibit in and you ruled it out. We wanted to show that since 1945 and 1939 as the price had gone up, it more than doubled the wells in Texas alone.

Q. I know, but you know full well there have been hundreds of wells drilled in places merely to develop gasoline to exist in a reservoir to provide gas for a pipe line? A. I believe in the early days when they drilled for gas they drilled for gas and found oil.

BLEED THROUGH

BLURRED COPY

Q. I know, you said the last five years? A. They drilled gas because the price had gone up. The price at the wellhead had increased and it was an incentive to the operator to do additional drilling.

Q. Of course, that is easy to argue, but you know they drilled, Phillips has drilled gas wells, to be practical, on known acreage to supply gas to Panhandle Eastern Pipe Line Company where the selling price was four cents? A. Yes, sir; but if the price had gone down to two cents they wouldn't have drilled those wells.

Q. Are you sure they wouldn't? A. I am pretty sure they wouldn't. I know if I was them I wouldn't have done it.

Q. I know, but that was the price and they drilled at that

[4192]

price and if you had an outlet at two cents and the well was drilled, who is to say that it wouldn't have been sold at two cents? A. That is true, they would have sold the gas at two cents but whether or not it would be feasible for them to go along and recover all that gas in that well up to 50 pounds abandonment pressure is another question.

Q. That is another question. Don't get the idea that I am favoring smaller and smaller prices no matter where they go. It is just like you said yesterday bigger and better pipe lines would provide a market for the gas in Texas? A. That is right.

Q. But just as bigger and better pipe lines will provide a market for gas in Texas, so also a fair price for the gas in that pipe line will promote the sale of gas at the

other end? A. That is correct, but, then, in turn if the producer and gatherer, processor has a field that some outside agency will step in and put in a ceiling or a minimum on that price, that is another question, and it is going to affect a great deal of additional recovery of reserves and additional gas for those pipe lines, irrespective of how many pipe lines we have through the state. You are going to lose more gas going into those lines, if they are afraid to put the gas into those lines.

* * *

[4228]

Q. Yes, that is right, but you assumed that the price would be so low that he would not be able to meet those costs? A. That is correct.

Q. But if on the other hand you assume he has allowed a price or a price is fixed, if it is fixed, which will compensate for all his out of pocket costs, carrying costs and some profit, although some may say it would be inadequate, this answer that you gave was not in consideration of a situation such as I have described? A. Well, it could be if you went ahead and fixed the price at that particular time where he could just make it pay for his cost or a little bit profit.

Q. Let's make it an adequate profit? A. All right, an adequate profit, and then his other operating conditions as far as production of his oil wells were increased, so the cost of producing that casing-head gas increased, and you held him down to that price which you fixed, he'd have an alternative to shut in his oil operations because he couldn't afford to take the price which you fixed.

BLEED THROUGH

BLURRED COPY

Q. Supposing he by contract had fixed that price and then

[4229]

he runs into this situation, he'd be in the same dilemma then? A. That is correct. If he made his own bed, he'd have to lie in it.

Q. I may say it may say it may have just as many thorns as the other one we were talking about, is that right? A. Under the other thorn he couldn't help himself, but under the contract he could wait and when the contract expired he could raise it, but under that same contract which you speak of, he is under the dilemma that we forced him into making that contract if we insisted that he put that gas into a line or close his oil wells, he wouldn't have any alternative as an oil operator to lose a hundred barrels of oil a day at the expense of three hundred thousand or five hundred thousand cubic feet of gas. In that case he would take any contract to keep his oil wells going.

Q. I mean whereby your order you force him to do that, are you implying that you would relieve him from a bad contract that he might make? A. No, sir, we wouldn't relieve him. We would insist that those oil wells, that that casing-head gas, be taken into a line and utilized under legal purposes or be put back into the ground.

Q. Well, under the question that I put to you I said where later on a price was established at a low figure, those were the words of you answer—

[4230]

A. (Interrupting) Yes, sir. What I meant in that connection was that assuming he had laid his connections and

gathering system and attained a price, say, of six cents or some other agency—

Q. (Interrupting) Call it FPC because everybody is thinking about them anyway. A. All right, say, FPC declared him a natural gas producer and went into the rate basis and found he should have three cents, he would be in that dilemma I just stated.

Q. But if on the other hand, the Federal Power Commission giving full consideration to all costs and fair return, fixed that six cents, he'd be right where he was?

* * *

PRESIDING EXAMINER: Answer the question.

THE WITNESS: That is correct, yes, sir.

BY MR. McALLISTER:

Q. And you haven't any reason to believe that the Federal Power Commission would not be fair and reasonable, have you, in the exercise of any authority that is required by law to exercise?

MR. SPARKS: It is argumentative, Mr. Examiner.

[4231]

MR. McALLISTER: I'm asking if from his experience.

MR. SPARKS: He has not been regulated by the Federal Power Commission as a natural gas company. How does he know how he might have been treated if he had been.

PRESIDING EXAMINER: The objection is overruled.

THE WITNESS: I don't believe I have stated throughout my examination here that the Federal Power Commission would be unable or wouldn't be unreasonable.

BLEED THROUGH BLURRED COPY

BY MR. McALLISTER:

Q. Your dealings with them haven't been such but to believe that they are fair? A. That is right.

Q. You would be willing to say you believe them to be fair? A. I believe them to be fair on what they have been doing, that is, the regulation of gate rates as far as pipe lines are concerned.

Q. And as far as issuances of certificates are concerned and other matters coming under their jurisdiction? A. That is correct, yes, sir.

* * *

[4232]

Q. Generally speaking you don't know when you are going to get a marginal well, do you, until after it is drilled? A. That is right, you don't know when you are going to get a well at all until you drill it.

Q. That is correct. How is this price going to

[4233]

effect marginal drilling? I mean it will affect any drilling, but why did you relate it to marginal drilling? A. It would affect any drilling, but by marginal drilling I meant infill drilling or acreage which an operator had found by previous drilling that it was marginal acreage. In other words, if he went ahead and drilled the first well on that acreage and found it to be 200 thousand cubic feet potential well, which would fall in the category of a marginal well, he would then instead of continuing to drill that acreage he must move up on the next contour or down the next contour to try and pick up larger potential wells.

Q. Or he might drill another section there because he might feel that that was just one of those unhappy experiences that you sometimes encounter in the oil and gas business? A. That is right, yes, sir. And then that marginal acreage under a depressed price, he would just hold that in abeyance until he could afford to go back in and do additional drilling.

Q. Well, it is just like a farmer who has a certain amount of land that is down around a creek bottom and it is flooded every now and then and one thing and another, and then the price of wheat or cotton is high, why, he takes a chance and plants it and other times it isn't worth

[4234]

the chance and he just passes it by? A. That is correct. That same thing will apply to any industry.

Q. It applies anywhere. It is a question of price in relation to possible production? A. Yes, sir, that is right.

Q. And it is the incentive that arises from the possibility of greater gain to the higher price? A. That is correct. That can be be pointed out in many instances and instances in oil, that the price of oil now of two dollars and sixty-five cents, we are producing greater and greater of those stripper reserves, while at a dollar a barrel it might not have been feasible or economical to continue to produce the wells.

Q. And when it drops below a dollar as it did back in the '30's— A. (Interrupting.) We abandon them completely.

Q. And there would be none of that oil recovered? A. That is right.

BLEED THROUGH

BLURRED COPY

Q. So the economic price recovered for gas is a variable that depends upon many conditions? A. The economic price?

* * *

[4241]

Q. The Panhandle Eastern Pipe Line was built, the Cities Service built lines out, the Canadian River and Colorado Interstate, Natural Gas Pipe Line Company, and Texoma and some of those lines began taking volumes of gas which at first didn't substantially take up the full volume, but as the markets grew they made a dent, you might say, in the supply and the price began to be, the price for gas began to be, a reality rather than a nullity? A. Yes, sir.

Q. Now, it would be pretty hard for a person without a very detailed study to say whether it was the price increase that caused the market or whether the market was what increased the price, isn't that right? A. That is just like the example you gave whether the chicken laid the egg or the egg—

Q. (Interrupting) Yes, it is pretty much that thing, isn't it? A. That is right.

Q. And today availability of markets will do as much or more for conservation by making available full complete facilities to take care of all flare gas or excess gas production than will price alone, isn't that right? A. I believe both of them will go hand in hand.

[4242]

Q. Both of them go hand in hand? A. That is right.

Q. As a matter of fact, have you ever thought of the proposition that if casing-head gas could be purchased at a slightly lower figure than gas well gas that the pipe lines might be able to exert themselves more to acquire that gas and take it out in the interest of conservation and save the gas well gas? A. That is correct, that is right, that happens, I believe, every day our fields in Texas. If a pipe line has made contracts in a field to dry gas and at the same time has obtained contracts in the field for casing-head gas at lower price than dry gas well gas, they will only take so much gas from the dry gas wells to hold the contract, but will take moves of their gas from the casing-head gas.

Q. And that will be a distinct aid to conservation? A. Yes, sir.

* * *

[4244]

Q. And you are familiar, are you not, with the operations of the Panhandle Eastern Pipe Line Company in some respects, have been subject to the jurisdiction of the Federal Power Commission over the years in the past? A. That is correct, insofar as the Federal Power Commission in fixing them, as a transmission lines, the gate rates.

Q. And so far as certificates of convenience and necessity are concerned? A. Yes, but you don't fix their rates at the wellhead as a producer or gatherer, do you?

Q. I'd like to ask you a few questions and I'll go up there and you can come down here maybe. A. All right, go ahead.

BLEED THROUGH

BLURRED COPY

Q. With respect to some of the other operations of the Panhandle Eastern Pipe Line Company, they are under your jurisdiction, as far as the production and gathering of gas as I outlined they are under our jurisdiction.

Q. Has there ever been any conflict that you know of between them? Have you encountered any rule, regulation or order

[4245]

of the Federal Power Commission that in any way interfered with the exercise of what you consider to be your proper functions in regulating or laying down rules applicable to the operations of the Panhandle Eastern Pipe Line Company in the State of Texas? A. There hasn't been any to date insofar as the production and processing and gathering of gas is concerned, no, sir.

Q. Would your answer be the same with respect to the operations of the Texoma Natural Gas Company? A. Yes, sir, Texoma Natural Gas Company, you exert your jurisdiction so far as a transmission line in fixing the gate rates. The Railroad Commission exerts its jurisdiction only so far as the production, gathering and processing of the gas and there is no conflict between the Railroad Commission and the Federal Power Commission as to that.

Q. You are stating what you do with respect to Texoma Natural Gas Company and the Federal Power Commission may do a little more than you have outlined? A. Yes, sir, I am just saying that as far as granting them the certificate of convenience and necessity and fixing gate rates, why—

Q. (Interrupting) Prescribing accounts— A. (Interrupting) And so forth, that is your jurisdiction, yes.

Q. Texoma is a producer and gatherer in Texas? A. Yes, sir, they produce and gather the gas in Texas.

[4246]

Q. And they also process it? A. Yes, sir, they process it.

Q. And the Canadian River Gas Company is in the same situation? A. Yes, in the same situation as the United Gas Company would be or the Lone Star Gas Company would be.

Q. The Lone Star Gas Company does not produce? A. Well, they have a producing company, the same situation at United Production Company.

Q. That is right, but Lone Star does gather the gas that is produced by the Lone Star Producing, Lone Star Gas Company does gather the gas produced by Lone Star Production Company? A. Yes.

Q. And Lone Star Gas Company processes the gas through gasoline plants which are operated by Lone Star Gas Company? A. Yes, sir, that is right.

Q. And Canadian River Gas Company some years ago —I said some years ago, after proration order in the Panhandle field in '48, the latter part of '48—encountered difficulty in providing the volume of gas that they required to their markets, is that right? A. Yes, sir.

Q. And they have an obligation to Colorado Interstate to deliver a certain volume of gas to them and Colorado Interstate had an obligation to deliver certain gas to Natural Gas Pipe

BLEED THROUGH

BLURRED COPY

[4247]

Line Company of America, or are you familiar with that? A. I am only familiar insofar as that prior to that Commission Order of 1948 in which we lumped the west sweet and west sour in prorating it as one field, that prior to that Canadian River Gas Company drilled very few wells on their acreage and they could produce all their market demand from their own wells based on 25 per cent of open flow. When the Commission began in September 1948 to prorate the west Panhandle field as one, that is, including the sweet and sour under the allocation of two thirds acreage plus one third potential, Canadian River Gas Company protested that formula and sued the Commission. We insisted that the proration unit is 640 acres, if they wanted additional gas they had an opportunity under our order to drill their acreage to six forty and by doing so they could not only end up with their own market demand but increase their ability to produce gas from their acreage.

Q. That is right. And when your order stuck, let's put it this way, they weren't able to upset it— A. (Interrupting) They started drilling wells.

Q. But in the meantime they were unable to meet their market demands and had to go out and buy gas elsewhere? A. Well, that is the purpose of proration. If they can't get it from their own wells and connections they have interchange or lay lines—

Q. (Interrupting) I said there they had to go out and buy

other gas. As a matter of fact, they didn't, they cut back on their production, but Natural Gas Pipe Line and Texoma, who were short, had to go out and buy gas? A. That is right.

Q. And you know that Canadian River produces gas from a great number of wells, it gathers the gas from those wells, it processes the gas and then carries it some distance beyond the processing plant to a connection with Colorado Interstate Gas Company? A. Yes, sir.

Q. As a producer and gatherer and processor, the Federal Power Commission has fixed the price at which it is to sell that gas to Colorado Interstate, you know that? A. I didn't know that they fixed it at the wellhead as a producer?

Q. (Interrupting) I didn't say that. They fix the price at which the gas is sold by Canadian River to Colorado Interstate—

MR. SPARKS (interrupting): Mr. Examiner, if they have, they have, and I assume it is part of the official record of the Commission. I don't see any necessity for proving it of this witness?

THE WITNESS: I don't know.

PRESIDING EXAMINER: The witness said he didn't know.

THE WITNESS: I don't know.

MR. SPARKS: I'm sorry, I didn't hear his answer.

BLEED THROUGH

BLURRED COPY

BY MR. McALLISTER:

Q. If it is a fact that the Federal Power Commission has done as I have stated, has that operation by the Federal Power Commission interfered in any way with your exercise of your authority within the State of Texas? A. It hasn't as far as our agency is concerned, but it has with other agencies.

Q. You are not speaking for them, are you? A. No, but it has insofar as when we fix the price in the Panhandle field, west Panhandle, ascertained the price, they have been kicking to us and to the other agencies that they couldn't pay the taxes on that price.

Q. On which price? A. On the price which we set at four and a half cents and you, I believe, had told them at three and a half. We insisted that there it was the four and a half.

Q. And they paid on that basis, and the Federal Power Commission never said that any other price should be the basis for your taxes, did they? A. No.

Q. It is one of those things where a fellow is trying to save his own hide and he is likely to blame most anybody if it will help him, is that right? A. I presume it is right.

[4250]

Q. But eventually he paid the taxes based on the price which you fixed in the State of Texas? A. But there is a conflict, it seems to me, as to what should be the price there.

Q. We can argue that there is a conflict, but has it in-

terfered with your exercise— A. (Interrupting) Oh, no, it hasn't interfered with our exercise.

Q. And to the extent that Texoma operates as a producer and gatherer of gas in the State of Texas and delivers that gas to Natural Gas Pipe Line Company, after having processed it, I mean after Texoma processed it, has that operation of that company as a producer and gatherer in any way by reason of the authority of the Federal Power Commission of it refused or failed to comply with all of your rules and regulations regarding production and gathering and processing? A. They haven't failed to comply with our rules as far as production and processing or gathering, no.

Q. You stated here the other day that if the Federal Power Commission took jurisdiction over Phillips— A. (Interrupting) I don't believe I testified that—

Q. (Interrupting) May be you didn't. I mean it has been said here. You haven't said that, let's cut it short that way? A. I haven't said anything like that on the record. I don't believe I have.

Q. I appreciate it, but I have read so much along that

[4251]

line that maybe I just picked it up and thought you had. I appreciate your correcting me. In addition to Texomas Natural Gas Company, Canadian River Company, Panhandle Eastern Pipe Line Company, I'm going to read some others who are producers and gatherers in the State of Texas as I understand it and who also operate under your jurisdiction and are likewise natural gas companies—I'm

BLEED THROUGH

BLURRED COPY

going to read them all and ask you to say whether you have experienced any difficulty because they were regulated to a certain extent by the Federal Power Commission within the provisions of the Natural Gas Act, and those companies are Southern Union Gas Company, Texas Gas Utilities Company, Consolidated Gas Utilities Company, Northern Natural Gas Company, Arkansas-Louisiana Gas Company and Cities Service Gas Company, now, all of those companies are natural gas companies under the jurisdiction of the Federal Power Commission and we regulate certain of their functions? A. You just regulate them insofar as fixing the gate rate.

Q. Don't tell me how far we do because I'd have to differ— A. (Interrupting) No I'm asking you that, aren't you regulating them just insofar as fixing the gate rate, you are not regulating them insofar as production, processing and gathering?

Q. No; as I said the other day, so far as I know we will never understand to have anything to do with production. A. Then certainly there hasn't been any conflict there.

[4252]

Q. But regardless of what our jurisdiction has been across the board on all of these companies, you have never found any of them attempting to hide behind any of our orders as a reason for avoiding your regulations? A. No, sir, I believe I stated we haven't had any conflict, so far as production and processing and gathering was concerned. As I state, so long as you haven't regulated them as far as the production and processing and gathering of gas—

Q. (Interrupting) But so far as Canadian River was concerned we did— A. (Interrupting) Is that a gate rate or what? I don't know.

Q. It is a gate rate, but included in the price at the gate were all of their costs up to that point, but the only point I am asking you about is not to discuss the principles we follow, whether they are right or wrong, but what I'm asking you is the result of that, what we did, has never interfered in any way so far as you know with the exercise of your proper authority in the State of Texas? A. No, sir; if they would refuse to follow a rule or regulation we'd shut them in as any other company.

Q. And when you shut in their wells you never heard the Federal Power Commission claiming they had any authority in that regard? A. No, sir.

[4253]

Q. Or as to the spacing of wells? A. No, sir.

Q. Or as to the allowables out of any wells? A. No, sir.

Q. In addition to those I have given you there some in the State of Texas that have gathering lines and gasoline plants and I think in questioning Mr. Murray, I mentioned three gasoline plants of the United Gas Pipe Line Company, do you recall those? A. I believe you mentioned Augua Delces, Refugo and Carthage, yes.

Q. They have the gathering lines at the gasoline plants? A. Yes, sir.

Q. And United Gas Pipe Line, you know, is a natural gas company under our jurisdiction. As far as you know, nothing that the Federal Power Commission has done in

BLEED THROUGH

BLURRED COPY

its regulation of United Gas Pipe Line has interfered with your proper authority and regulation of these gasoline plants, or gather lines or anything, has it? A. The same answer I gave before would be the same in this case in that insofar as gathering and processing and production of gas there hasn't been any conflict, no.

Q. There hasn't been any conflict at all, so far as you know? A. No, no, to date I don't know of any.

Q. Well, of course, somebody could get off base in the

[4254]

future, you know.

Q. El Paso Natural Gas Company also has a small plant in Texas, does it not? A. In the San Salvador field in Southwest Texas.

Q. And I presume you have been getting along all right with them in the regulation of their gathering and processing down there? A. Well, we have in a fashion, yes.

Q. Are you having any trouble with them? A. That is not to put on the record.

Q. But it isn't the result of any conflict with the rules and regulations of the Federal Power Commission, is it? A. No, sir, it is just our jurisdiction of production, gathering and processing.

Q. It comes under that and you have a little difficulty with them as you do with others from time to time? A. Yes, sir.

Q. But it is not the result of a conflict between your jurisdiction and the jurisdiction of the Federal Power Commission? A. No.

Q. Are you familiar with the operations of the West Texas Gas Company? They have a gasoline plant they call Wilhelm plant in West Texas, in the West Panhandle, not West Texas? A. Yes, sir.

Q. And they have gathering lines and a gasoline plant?

[4255]

A. Yes, sir.

Q. Would your answer be the same with respect to them so far as any conflict with— A. (Interrupting) That is correct, yes, my answer would be the same insofar as the production, processing and gathering of gas.

Q. And West Texas Gas Company, I presume you know, and if you don't know, I'll state that the orders of the Federal Power Commission will show it is a natural gas company and subject to its jurisdiction? A. I didn't know that company was under that jurisdiction.

Q. I mean it shows— A. (Interrupting) If your record shows that, then it is.

Q. I mean to say, though, it shows how completely you can operate in your sphere and never be concerned with the regulation of the Federal Power Commission in its proper sphere, isn't that right? I mean when you didn't know about it? A. Insofar as the jurisdiction is concerned, the Federal Power Commission staying in its bounds so far as fixing the gate rates on transmission lines and the Railroad Commission staying in its end of production, gathering and procession is concerned, I'll agree with you.

Q. The Federal Power Commission has been in exist-

BLEED THROUGH

BLURRED COPY

ence for about 13 years and they haven't extended into your domain yet, have they?

[4256]

A. That is why we are here, a fear of what they might do.

Q. It is the producers and gatherers we are talking about and we are— A. (Interrupting) Yes, but only insofar as fixing the gate rates on the transmission lines, but during those 13 years you haven't been down here telling us as to what we should do or haven't done anything concerning production, gathering or processing of gas.

Q. Well, is there any thought now that we are going to make the practice that they have— A. (Interrupting) That is what our fear is.

Q. But it is only fear, it is not based on any experience in the past? A. We can just—

Q. (Interrupting) It is just fear? I mean let's call it concern. A. That is right, it is our concern, because that fear exists in a number of producers who are now having large gas reserves in the neighborhood of from 13 to 15 trillion feet and the public cannot avail themselves of those reserves because that company is afraid of the Natural Gas Act.

• • •

[4260]

Q. (Interrupting.) You are saying the higher the price is at the wellhead the more conservation we will have and the more gas will be used? A. Yes, sir. Let me say this, that if the purchaser is willing to pay five cents and the

gas at the wellhead was two cents, I believe he wouldn't have any trouble at all to buy all the gas he wanted to in that field or any other field at five cents.

Q. All right, but I suggest to you that you really mean the price at some delivery point where there is a purchaser willing and able to buy it at rather than the well-head price. A. I am speaking only of wellhead price.

MR. TULANE: Mr. Examiner, may I have my statement read back and I request the witness to state whether or not he agrees with it.

[4261]

PRESIDING EXAMINER: Read the question.

(The last question was read by the reporter.)

A. No, when you say delivery point, you are assuming that if the purchaser at the wellhead had gas to sell and over here was a gatherer—

BY MR. TULANE:

Q. (Interrupting.) Just a minute. Purchaser who wants to buy gas. A. All right, a purchaser who wants to buy gas, if he wants to get that gas from this well, he either has to lay the gathering line to get it or the producer would have to lay the gathering line.

Q. I understand that perfectly. A. All right. So the purchaser who wants to pay five cents for the gas and lay that line, he can get that gas all he wants to.

Q. I don't doubt that, but if the producer lays the gathering line and has to bear the expense and delivery of that gas to some point on the line, then that is not a well-head price, is it? A. That is right, that then becomes a part

BLEED THROUGH

BLURRED COPY

of your production system. You can't segregate the gathering system from the well, because to produce the gas into the line, you must lay a gathering line.

Q. Exactly, and when you say the price influences

[4262]

conservation, you mean that the price at this transfer point must be such that whoever has to bear the cost of the gathering system did pay for it? A. Certainly; it isn't feasible—

Q. (Interrupting.) That is enough.

MR. CRENSHAW: Let him explain his answer. He is not confined.

MR. TULANE (interrupting): Mr. Examiner, would you allow me to ask my questions and allow counsel to bring what he wants to up in redirect examination?

PRESIDING EXAMINER: I think you can do that.

MR. CRENSHAW: He wanted to qualify his answer—

MR. TULANE (interrupting): He said certainly, and that was all I wanted.

PRESIDING EXAMINER: Do you want to qualify your answer?

THE WITNESS: I certainly say it would not be feasible for him to go get the gas to market unless he can go ahead and lay the gathering system.

PRESIDING EXAMINER: Read the question and answer, please.

(The next to the last preceding question and answer were read by the reporter.)

BY MR. TULANE:

Q. So then you are not really talking about wellhead

price when you say that price influences conservation? A. Well, if I understand you, you want me to cut

[4263]

off the gathering of gas from the wellhead gas?

Q. No, I want you to put it in. A. All right, if I put it in the only way you can get this gas into any line is for that price to be such that he can afford to lay those lines.

Q. Yes, but the point is this, that if the owner has had to pay for the gathering lines he gets one price. If the collector pays for the gathering lines he will not pay as high a price, will he? A. That is correct, but it is synonomous there. I can get the gas for two cents a thousand if I don't have to make a big investment to lay the gathering lines, but if I am going to have to lay the big gathering lines, I'm going to have to get five cents a thousand. It is immaterial.

Q. But when you lay the lines yourself you are delivering the gas at a point away from the wellhead, are you not? A. To the processing plant.

Q. And you are getting wellhead plus transportation for the length of the gathering line? A. I don't see how you can cut one off from the other.

Q. I think the record is clear on it anyhow. May I ask this question, then, when you say wellhead price, you do not necessarily mean the price paid for a sale at the head of the well?

[4264]

A. I mean the wellhead price would be the arm's length contract.

BLEED THROUGH

BLURRED COPY

Q. I don't believe that answers the question. A. All right, I'll answer it. That is correct. I mean that what he could get at the wellhead, and if he has to lay the lines, then the producer will include that as his wellhead price.

Q. Is it your position in the conservation matters that the price which promotes conservation best is that price which encourages the use of all marginal properties, including marginal wells and marginal methods of production such as the use of compressors and vacuum system and such? A. That is correct; I believe in a price that would create the greatest ultimate recovery of gas for mankind or production of oil for mankind.

Q. You are not trained as an economist, are you, Mr. Baumel? A. No, sir, I am just a poor engineer.

* * *

[4277]

Q. If the Federal Power Commission assumed jurisdiction over Phillips and attempted to regulate the rate at which Phillips sold at the Sherman and Hansford plants—

MR. McALLISTER: The Sherman.

BY MR. TULANE:

Q. The Sherman. Would that in any way interfere with your allocation and proration orders? A. It wouldn't interfere with our allocation and proration orders, no.

* * *

[4286]

Q. I don't think that is responsive. I asked you solely if you are not regulating price today— A. (Interrupting) I think we went over it that at the present time the legis-

lature never has given the Railroad Commission power to set any price, minimum or maximum or whatsoever, so how can you ask me whether or not it is going to conflict. It wouldn't conflict if we don't have any power to set the price.

* * *

[4314]

T. E. SMILEY

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Sparks

* * *

[4331]

MR. SPARKS: Let the record show that in support of the tender of Exhibit No. 149 the witness, if permitted to do so, would testify as follows:

> "The first column of figures under the heading '35 Natural Gas Companies in Southwest', was obtained from the files of F. P. C. in Washington, D. C., from the annual reports Form 2 except where otherwise stated. All Class 'A' and 'B' Natural Gas Companies reporting to F. P. C. which operate in the seven southwestern states of Arkansas, Kansas, Louisiana, Mississippi, New Mexico, Oklahoma, and Texas are included and are listed on the third page of the exhibit. The Public Service Corporation of Texas was included in

BLEED THROUGH

BLURRED COPY

Class 'C' and 'D' companies during 1946 and 1947 and in class 'A' and 'B' companies in 1948 and 1949 and was included in the exhibit for all four years. Texas Gas Transmission Corporation was not included in the statistics published

[4332]

by F. P. C. for 1946 and 1947 and is therefore not included in the exhibit for those years but its predecessor, Memphis Natural Gas Company was included. Michigan Wisconsin Pipe Line Company, Renosa Pipe Line Company and Texas Eastern Transmission Corporation did not file annual reports with F. P. C. for 1946, therefore are not included in the exhibit for that year.

"The 'Net Investment' shown for the Natural Gas Companies is the 'Gas Utility Plant less Reserves' at the end of each year as shown in the statistics published by F. P. C. each year, and does not include Other Utility Plant or Other Property.

"The amounts shown as 'Land, Geological and Geophysical Expenditures' for the Natural Gas Companies represents the debits to account 142.1 'Preliminary Natural Gas Survey and Investigation Charges' as shown in schedule 240-A of the annual reports to F. P. C. by each company for each year plus the total of account 513 'Other Exploration Costs' as shown under Column 'F' of schedule 472 in the annual reports to F. P. C. by each company for each year. Account 513 has been changed to account 739.4 in the present

classification of accounts. From the reports it would appear that very little of this is actual geophysical surveys or

[4333]

geological investigation of possible new producing areas.

'The percents shown are the ratio of each class of expenditure for each year to the net investment shown for such year. For example, Land, Geological and Geophysical expenditure for the year 1946 for the Natural Gas Companies are shown as $0.17 which is in Millions of Dollars and therefore represents expenditures of $170,000. This amount was divided by the investment of $753,900,000 which furnishes the percent shown as 0.02% in other words, 2/100 of 1%. All other percentages on the table for the Gas Companies, 30 Oil Companies and for Phillips Petroleum Company were determined in the same manner.

"Dry Hole Expenditures represents the total of account 511 'Non-Producing Well Drilling' as shown in column 'E' of schedule 472 of the annual reports to F. P. C. by each company for each year. Account 511 has been changed to account 739.2 in the present classification of accounts.

"Delay Rentals represent the total of account 510 (new account 739.1) as shown in column 'C' of schedule 472 in the annual reports to F. P. C. by each company for each year.

"Additions to Leasehold Investment was obtained

BLEED THROUGH

BLURRED COPY

[4334]

from the annual reports of each Gas Company for each year by taking the total of the additions from column 'D' of schedule 400 for accounts 330.1 'Natural Gas Producing Lands'. Since many companies reported transfers from non-producing leasehold investment as an adjustment, the debits in the adjustment column of schedule 400 are also included unless they could be identified as a mere accounting reclassification or the result of a merger of companies. The gross additions for undeveloped leases is not shown in the annual reports, therefore the net increase or decrease was obtaind by taking the difference between the balance at the end of each year and the balance at the end of the preceding year. Such balances were obtained from schedule 405 'Gas Plant Held for Further Utility Use' and were checked with amounts shown in schedule 479 'Natural Gas Land Acreage' as the cost of non-producing acreage in the annual reports to F. P. C. each year. Decreases in this amount could result from transfers to producing or from abandoned leases, sales, etc. Since some companies charged abandoned leases directly to expense whereas others provided a reserve for a portion or all of abandoned leases, it was necessary, in order to obtain the actual abandoned leases for each year, to take the total of account 512 'Abandoned

[4335]

Leases' (new account 739.3) from schedule 473 less the provisions for abandoned leases as shown in sched-

ule 416 plus the abandoned leases charged to account 250.3 'Reserve for Abandoned Leases' as shown in schedule 416 all from the annual reports to F. P. C. each year. This total of abandoned leases was added to the total additions to producing leases and the net change in non-producing lease investment; and from this total was deducted exploratory costs cleared to gas plant accounts as shown in schedule 240-A since such amounts duplicate amounts already included in Land. Geological and Geophysical expenditures. The total thus obtained should represent the total additions to leasehold investment, however, we noted that certain companies still resulted in a net decrease rather than an addition, therefore another trip to Washington was made to investigate these instances. It was found that sales of leasehold investment were often not reported in detail in the annual reports. Every effort was made to locate the cause of such decrease in leasehold investment by investigating docket files, reclassification entries, files of entries for purchases, sales mergers and etc. In some instances no explanation could be found and in such cases the net decrease for such companies for that year was eliminated so as not to reduce the

[4336]

expenditures of other companies. In the course of making this investigation, we also attempted to eliminate any additions due to mergers or liquidations of affiliated companies since such items would not represent

BLEED THROUGH

BLURRED COPY

actual expenditures. The only major item of this nature located for the 35 Southwestern Natural Gas Companies was the liquidation of Sagamore Oil & Gas Company by the Union Gas Systems, Incorporated involving producing and non-producing leases in the amount of $472,501.26 and gas wells in the amount of $285,-817.40 during the year 1949. The files of the Federal Power Commission in respect of purchases and acquisition of properties is not complete even though the Gas Companies are required to file copies of such entries. However, it is believed any other acquisitions of producing properties were merely normal purchases of a small number of wells or leases.

"Total Exploration Costs (Including Leasehold Additions) represents the sum of the expenditures for Land, Geological and Geophysical, Dry Holes, Delay Rentals and Additions to Leasehold Investment.

"Cost of Drilling and Equipping Producing Wells represents the additions to such investment as shown in column 'D' of schedule 400 for accounts 331.1 'Gas Well Structures', 332.1 'Producing Gas Wells—Well

Construction' and 332.2 'Producing Gas Wells—Well Equipment'. Debit adjustments to these accounts shown in column 'F' of schedule 400 were also included. The additions by Union Gas Systems, Incorporated due to the liquidation of Sagamore Oil & Gas Company were eliminated from such additions as explained regarding additions to leasehold investment.

"Total Expenditures for Exploration and Development is the sum of the Total Exploration Costs and the Cost of Drilling and Equipping Producing Wells.

'30 OIL COMPANIES'

"The data for the 30 Oil Companies was obtained from the 'Financial Analysis of 30 Oil Companies' published by the Chase National Bank of the City of New York, Petroleum Department by Joseph E. Pogue, Vice President and Frederick G. Coqueron for each year. This is a statistical publication which is widely accepted in the industry as accurately portraying the statistical data published therein.

"The companies included were not chosen by us, but are all of the companies included in the study as stated in the report and are apparently considered by the authors as representative of the industry. Data for individual companies is not shown in the report. The net investment represents the net investment (less reserves) at the

[4338]

end of the year for all departments including Refining, Marketing, Pipelines and etc., as well as Producing, within the United States as shown in the report for each year, but does not include investments by such companies in foreign countries.

"The report for the years 1946 and 1947 did not furnish a detail of exploration and development costs but the report for 1948 included such expenditures in

BLEED THROUGH

BLURRED COPY

Table 17 on page 16 which is shown separately for each of the years 1946, 1947 and 1948 in the following detail.

"Acquisition of New and Renewal Leases and Cost of Drilling and Equipping Wells (including dry holes)

"Exploratory Expense (including land, geological and geophysical activities)

"Lease Rentals.

Total Expenditures

The detail of certain expenditures such as dry holes was not available from the report. The expenditures for the year 1949 were obtained from Table 15 on page 14 of the report for 1949 which shows the same data as for the 1948 report.

'PHILLIPS PETROLEUM COMPANY'

"All of the data for Phillips Petroleum Company was

[4339]

obtained from the books, records and statements of the Company kept in the ordinary course of business. The net investment shown is the total net investment for all departments at the end of each year as shown in the Financial and Operating Statement of Phillips Petroleum Company and Subsidiary Companies for December 31, of each year. The investment shown represents the total investment wherever located including

foreign countries and includes all consolidated subsidiaries. It does not include subsidiaries for which the company did not furnish all capital requirements. The assets of such unconsolidated subsidiaries are considered immaterial in relation to the total assets and business of the company and its consolidated subsidiaries.

"In 1946 there were no unconsolidated subsidiaries. In 1947, Wasatch Oil Refining Company, Idaho Refining Company and West Edmond Oil Company were the only unconsolidated subsidiaries. In 1948 and 1949 the only wholly owned unconsolidated subsidiary was West Edmond Oil Company. That company formerly had two subsidiaries but they were liquidated in October, 1949. The only unconsolidated wholly owned subsidiaries in 1950 were West Edmond Oil Company, Continental Consolidated Corporation and its subsidiary, Continental

[4340]

Corporation.

"Land, Geological and Geophysical Expenditures are the total of such expenditures in the United States and Canada as shown by the records of the Company. It does not include expenditures in other foreign countries such as South America.

"All other classes of expenditures for exploration and development shown on the exhibit are likewise for the United States and Canada, but excluding South America and they represent the total of such expenditures.

BLEED THROUGH

BLURRED COPY

"Dry Hole Expenditures represent the total dry hole expense as shown by company statements including dry hole contributions less a minor amount of such dry hole contributions representing cost of leases contributed. The expenditure for such leases were made at the time the leases were acquired as an addition to leasehold investment.

"Delay Rentals represent the total of such expenditures under oil and gas leases as shown by company statements for the United States and Canada but excluding South America.

"Additions to Leasehold Investment represent the total expenditures for producing and non-producing leases as shown in the Statement of Funds Provided and their Application included in the Financial and

[4341]

Operating Statement for each year and from supporting records. It includes the cost of all new or renewal oil and gas leases, options, permits and etc., including Canadian but not including South America.

"Total Exploration Cost (Including Leasehold Additions) is the sum total of the foregoing expenditures.

"Cost of Drilling and Equipping producing wells represents the total of the capital expenditures as shown in the Statement of Funds Provided and their Application and supporting records of the company for lease equipment and intangible development costs from which we have excluded dry holes since they are stated separately in the exhibit.

"Total Expenditures for Exploration and Development represents the Total Exploration Costs plus the Cost of Drilling and Equipping Producing Wells."

PRESIDING EXAMINER: The exhibit will be appropriately marked excluded, offer of proof, exception, and filed by the reporter with the Secretary of the Commission.

* * *

[4484]

ELMER CAPSHAW

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Green

Q. State your name, please, sir. A. Elmer Capshaw .

Q. By whom are you employed, Mr. Capshaw? A. I am employed by the Corporation Commission of the State of Oklahoma.

Q. What is your business or profession? A. I am a petroleum and natural gas engineer.

Q. Will your briefly state on the record your educational background as a petroleum and natural gas engineer? A. I was graduated from the University of Oklahoma with a bachelor's degree and a masters degree. I did a considerable amount of work toward a doctor's degree at the

[4485]

University of Oklahoma. I have done a little work in the Colorado School of Mines. I am a registered petroleum

BLEED THROUGH

BLURRED COPY

and natural gas engineer under the laws of the State of Oklahoma.

[4486]

Q. How long have you been employed by the Corporation Commission of Oklahoma? A. Almost 17 years.

Q. As petroleum engineer? A. Most of that time, yes, sir, as a petroleum engineer.

Q. During that period of employment what experience have you had in the practice of your profession generally? A. Well, generally I have spent 17 years in the active enforcement of oil and gas conservation laws in the Corporation Commission of the State of Oklahoma and the orders of the Corporation Commission.

Q. Generally, are you familiar with the development of the conservation laws of Oklahoma and the orders of the Corporation Commission with regard to conservation? A. Yes, sir. I have been closely associated with the development of the law, and of the orders and purposes and general procedure of the Corporation Commission in the establishing its oil and gas conservation program.

Q. Are you familiar with the production history of gas in the Hugoton gas field? A. Yes, sir, I am quite familiar with the Oklahoma portion of that field and the Kansas portion, and I am somewhat familiar with the Texas portion.

Q. Are you charged with the duty of assisting in the enforcement of the orders of the Oklahoma Commission in regard

[4487]

to conservation of gas? A. Yes, sir, I am.

Q. Have you done that in the Hugoton gas field? A. Yes, sir, I have spent very much of my time and work in that field and in regard to that field.

* * *

[4518]

Q. From your information of the Guymon-Hugoton field in your opinion what would be the abandonment pressure of the wells in that field? A. I would expect the abandonment pressure to be about fifty pounds.

Q. What consideration do you take into account in arriving at that figure?

MR. McALLISTER: May I have that question. I just can't hear these question at all, Mr. Examiner.

PRESIDING EXAMINER: Read the question, please.

(Question read by the reporter.)

THE WITNESS: This is such an enormous reservoir that unquestionably the abandonment pressure is going to be low, and how low it will be depends on just one thing, and that is what the price of gas is in the field at the time

[4519]

the wells are abandoned.

BY MR. McALLISTER:

Q. You say at the time the wells are abandoned? A. Yes, sir. Gas is going to be produced there so long as companies can produce it and sell it at a profit and price is a direct determinate of whether or not they can sell it at a profit.

Q. At the present rate of production how long down the road is that going to be? A. Before that field is abandoned?

BLEED THROUGH

BLURRED COPY

Q. I mean at the condition you speak of where you reach that point of fifty pounds. A. My opinion is it is going to be somewhere between twenty-five and forty years.

BY MR. SPARKS:

Q. Do you mean before the entire field is abandoned? A. Before the field is abandoned, yes, sir.

Q. Not before any well or group of wells might be abandoned? A. No, sir, not at all. Some wells have been abandoned, in a sense have been abandoned, the particular producing well has been abandoned and new wells have been drilled to replace them.

BY MR. GREEN:

Q. Does Oklahoma have a compulsory unitization law whereby

[4520]

oil and gas fields are compulsorily unitized and produced? A. Yes, sir, it does.

* * *

[4524]

Q. Are you familiar with the well spacing orders of the Corporation Commission? A. Yes, sir.

Q. Do you understand generally how they arrive at the size and shape of the various sizes and shapes of the drilling

[4525]

and spacing units in these fields, gas fields, included? A. Yes, sir.

Q. Does the price of gas have anything to do with reference to the size and shape of the drilling units that might be established?

* * *

THE WITNESS: The size and of the spacing unit is very greatly effected by the price.

BY MR. GREEN:

Q. The price of what? A. Of gas in that field, for this reason, if the spacing units are made too small in proportion to the price paid for gas in that field, the operator would be unable to drill all the locations he must drill and realize a profit if the price were not high enough to pay for drilling all those extra wells. In other words, in the Hugoton field our spacing order calls for 640 acres approximately. At the time we made that order there was contention by some of the gas companies that wells ought to be drilled on each quarter section. That would have necessitated the drilling of four times as many wells to drill up this field,

[4526]

if the Commission had followed that argument that was presented by some of the producers. Unquestionably our experience in that field is going to show that 640 acres will effectively drain it, and there would have been a great economic loss in drilling more wells there, particularly four times as many wells. The price of gas effects conservation of the gas in another way.

* * *

[4529]

Q. In the Hugoton area do you have large areas of low productivity around the edges of the pool? A. That is true. At least, that is indicated from all the information we have.

* * *

Q. Let me ask this question, unless wells are drilled in those areas of low productivity will gas be left in the

BLEED THROUGH

BLURRED COPY

ground that might otherwise be recovered? A. Yes, sir, some gas will be left in the ground that will not be recovered if wells are not drilled in the low productive area surrounding the pool.

Q. Do you have large areas of low productivity in the

[4530]

field?

* * *

THE WITNESS: The Hugoton pool unquestionably has gas for a number of miles out beyond where any wells have been drilled at the present time. Unquestionably there could be eight or nine, possibly a thousand more wells drilled on 640 acres in that field that would encounter some gas in the formation. It is my belief that there will be immediately drilled up to 1,200 wells in the pool, and possibly 300 more may be drilled provided the companies think they can pay them out in this outside low productive area. If the price were high enough that number might be increased to 2,000 wells instead of 1,500 wells.

BY MR. GREEN:

Q. So whether or not the wells are drilled depends entirely upon the price of gas, the economics of the situation at the time? A. It certainly does.

* * *

[4531]

RAY C. JONES

was called as a witness, and having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Green

Q. State your name, please, sir. A. Ray C. Jones.

[4532]

Q. Where do you live, Mr. Jones? A. Oklahoma City.

Q. What official position do you hold? A. Member of the Oklahoma Corporation Commission.

Q. How long have you been a member of the Commission? A. Since January, 1947.

Q. Prior to that time did you hold any official position with the State of Oklahoma? A. A member of the State Senate.

Q. For what period of time? A. From January 1935 to January 1947.

Q. Will you briefly relate the duties of the Corporation Commission of Oklahoma with reference to what duties they perform for the state? A. Well, the duties set out by the constitution of the State are primarily to regulate public utilities such as transportation companies, transmission companies, telephone and telegraph companies, gas and electric companies, as to their rates and practices, motor carriers, and by statute additional duties have been conferred upon the Commission such as the regulation of the oil and gas business in the state. That generally is what we do.

Q. The Corporation Commission of Oklahoma intervened in this proceeding in operation to the Federal Power Commission assuming jurisdiction in this case, did it not?

[4533]

A. That is right.

BLEED THROUGH

BLURRED COPY

Q. How many members of the Commission do you have? A. Three members.

Q. That action was taken after a vote and discussion by the members of the Commission, was it not? A. That is right.

Q. Will you state briefly the reason for the Corporation Commission intervening in opposition to the Federal Power Commission asserting jurisdiction in this case.

* * *

THE WITNESS: Well, the Commission feels like if the Federal Power Commission assumes jurisdiction in this particular case it would probably assume jurisdiction as to the regulation of rates, which would involve the price of gas at the wellhead and any gas that went into interstate commerce which might conflict with our jurisdiction as to our orders that have fixed a mimimum price for gas in the Guymon-Hugoton field. That is the chief reason why we have intervened.

* * *

[4535]

Q. The Corporation Commission fixes the size and shape of the space and drilling units, do they not, in Oklahoma in gas and oil fields? A. Yes, they do.

Q. Were you a member of the Commission at the time the seven cent price order was made by the Corporation Commission of Oklahoma? A. No, I wasn't.

Q. That happened in December just prior to your taking office in January, did it not? A. Yes.

MR. McALLISTER: May I hear the question, please.

PRESIDING EXAMINER: Read the question.

(The question was read by the reporter.)

THE WITNESS: That is correct.

MR. McALLISTER: Thank you.

BY MR. GREEN:

Q. Well, in fixing the size and shape of the spacing and drilling units does the Corporation Commission take into consideration the price of gas or the economics of the drilling of the wells? A. Yes, sir.

[4536]

Q. As one of the factors?

MR. McALLISTER: Mr. Examiner, there is two questions in that and I ask the witness be required to answer either one or the other or both and identify which. Take into consideration the economics, take into consideration the price of gas.

PRESIDING EXAMINER: Let's break it down into two questions.

BY MR. GREEN:

Q. Do you take into consideration the economics in fixing the size of spacing regulations? A. Yes, sir.

Q. Is price of gas a necessary factor in determining whether or not the economics of the situation justifies a particular size and shape of the spacing and drilling unit? A. It enters into the size of the spacing unit, yes. It might possibly enter into the shape, more paricularly the size.

MR. McALLISTER: Now we have a conclusion, Mr. Examiner. May we have an understanding what all the elements are that enter into economics because he said price is one of the things. What are the others?

BLEED THROUGH

BLURRED COPY

PRESIDING EXAMINER: Tell us what the other things are.

BY MR. GREEN:

Q. What are the other elements that you take into consideration in fixing the size and shaping of spacing and drilling units? A. We take into consideration the area to be drained, the

[4537]

size of the unit that can efficiently be drained by one well. We take into consideration the correlative rights of other operators and other owners and other interested parties. We try to fix these spacing units so that they will not only be economically sound they will actually efficiently drain the formation and still protect the adjoining owners of leases and the other interested parties.

* * *

BY MR. McALLISTER:

Q. What specific changes have you made with respect to the size, spacing and what-not with respect to the Guymon-Hugoton field since 1948? A. What specific changes have we made?

Q. In the rules with respect to the size, shape and spacing as to a drilling unit. A. So far as I know we have made no changes.

Q. You have made no changes whatsoever? A. Since 1948.

* * *

[4539]

BY MR. TULANE:

Q. If at such time as your minimum rate is set at one

[4540]

level and the federal rate is set at any point above that, at that time could there be any interferenc with the jurisdiction of your Commission. A. I can think of none right at this time.

Q. And the only possible conflict could arise if you desired to raise your minimum above the rate that had been fixed by the Federal Power Commission? A. I don't know whether that would be the only posible conflict. I don't know. I couldn't answer that question right now.

Q. Do you now personally know of any other possible conflict? A. Not without giving it some thought I can't think of any.

* * *

[4676]

ELMER CAPSHAW

resumed the stand, and having been previous duly sworn, was examined and testified further as follows:

Cross-Examination by Mr. McAllister

[4712]

Q. I believe you stated yesterday if a sufficiently high price could be established for gas at the well head in that area, the marginal area, all of that marginal gas could be recovered. A. No, I didn't make that statement, but that more of that marginal gas would be recovered.

BLEED THROUGH

BLURRED COPY

[4713]

Q. More of that, with a higher price per Mcf at the well head? A. Yes, sir, with a higher price, in all probability more of that marginal gas would be recovered.

Q. And as you moved the price on up, the further you can go out into the thinner sands and with less productivity per acre? A. That is correct.

Q. And it is just a matter of judgment how high the price would have to be to recover a given quantity of that marginal gas? A. Yes, sir.

Q. And that price would have to be a price related to the cost of recovery. When I say recovery I mean the cost of drilling the well or carrying or conveying that gas to a point of useful consumption. A. It would unquestionably be related to the cost. Companies will drill a well only if they can expect to get a return on their investment, and I don't think they will drill them purposely and expect to lose money on them.

Q. No, that has not been your experience in the oil and gas business? A. No, sir, it hasn't.

Q. As an engineer having responsibility with the Oklahoma Commission, it isn't your contention, is it, that

[4714]

the gas price for the whole field should be raised so high that it will enable the marginal lands to be produced at this time, or is it? A. The question of how high the price should be raised, of course, would involve whether or not it was high enough to develop marginal acreage wherein the production of the gas would be worth while.

Q. Let's put it this way, if it took twenty cents an Mcf to assure drilling in the marginal acreage at the well head, should that be the measure of the price that would be fixed for the entire Guymon-Hugoton field? A. No, sir, I don't think it should. If it took twenty cents at the well head, in order to get all marginal acreage drilled, the question should be, would the additional gas recovered be worth the raise in price?

Q. It is an economic study that can't be answered. A. That is right. It certainly can't be answered specifically, because you never know the exact tax and in the first place you don't know exactly how much more gas you are going to get, but you've got to make some kind of an estimate if you are going to set a price for that specific purpose.

• • •

[4716]

Q. What you have said about the possibility of drilling wells in the marginal acreage it is based entirely upon

[4717]

the assumption that a sufficient price would be fixed to justify that drilling? Is that right? A. Not necessarily a sufficient price be fixed, merely that—

Q. (Interrupting.) That they get a sufficient price? A. Yes, sir, merely that they get a sufficient price.

Q. And you are not now saying what that price would have to be? A. No, sir, I couldn't say what that price would have to be. It would all depend on circumstances. It may depend upon the time.

Q. You mean time— A. (Interrupting.) General prices may be entirely different now than they were ten years ago.

BLEED THROUGH

BLURRED COPY

Q. Or ten years in the future? A. That is right.

Q. All you are saying is that there is a relationship between, there must be a relationship between, the gas that is recovered and the cost of drilling the well. A. That is true.

Q. And as you go on out further the price has to be higher as the marginal lands and gas becomes more skimpy per acre, why, it takes a higher price to justify drilling. A. I wish you'd read that question. The wording didn't sound as if I could answer it.

[4718]

PRESIDING EXAMINER: Read the question.

(The question was read by the reporter.)

THE WITNESS: I can't answer that question without an explanation. He says as you go out further the price has to be higher. There seems to be an implication that a higher price is going to be paid for the outside drilling, the gas that comes from the outside drill, than is paid in the center of the field, and I am not anticipating such a situation at all. There must be a higher price prevailing in that field or they will not go further out or at least there will be limitations on how far they go out.

* * *

[4720]

Q. Am I to understand that it is your belief or opinion that the price fixed for a field should be sufficiently high that it will enable the least productive wells that may be drilled to pay out? I mean reasonably, not the one that hasn't anything in it, but I mean the price ought to be suffi-

ciently high to enable a person to produce and pay out on a commercial gas well? A. Yes, sir.

Q. And regardless of what that price is, whether it is eight or ten or twelve or twenty cents, that ought to be the price? A. The price ought to be sufficient to enable the drilling of a well into a source of supply in producing that gas in any case.

Q. And it is on that basis that you say these wells should be drilled in the marginal acreage to recover the gas, the wells ought to be drilled and the price ought to be high enough to justify the drilling of the wells? A. The price ought to be high enough to justify drilling some marginal wells, of course.

Q. All the marginal acreage? A. Your marginal acreage may be so poor that you couldn't justify a price high enough to force the drilling of that marginal acreage. That is easily possible.

* * *

[4723]

Q. And it is your opinion, is it, that the price of the gas should tend to be so high that it will permit the development of the marginal acreage by drilling of wells and that that cost of the marginal drilling for the recovery of gas should be the determining factor in fixing the price for the field as a whole? A. It certainly should not be the determining factor. It would only be one of the many factors. That should be taken into consideration, the additional gas that would be recovered by drilling marginal acreage, it should be one factor taken into consideration.

BLEED THROUGH

BLURRED COPY

Q. Not the only factor or the most important factor? A. No, sir, not the most important.

Q. And the consideration might be such that it would not influence the total over-all price at all if the gas to be recovered in relation to the total gas in the field would not justify a higher price?

MR. McALLISTER: Will you read that question. If you have any question about the question before you answer it, I'll be glad to clarify it for you.

[4724]

THE WITNESS: Yes, sir.

(The question was read by the reporter.)

BY MR. McALLISTER:

Q. I meant by that the gas to be recovered in the marginal acreage in relation to the total in the field would not justify a higher price? A. I think the additional gas recovered might, under certain circumstances, not be justified by raising the price.

Q. Or that the amount to be recovered wouldn't justify raising the price? A. That is right. I'm sure if you went far enough out to the outer edges you wouldn't be justified in trying to recover that gas by raising the price.

* * *

[4763]

RAY C. JONES

resumed the stand, and having been previously duly sworn, was examined and testified further as follows:

Cross-Examination by Mr. McAllister

* * *

[4765]

Q. In your testimony yesterday you said that price was an element in determining the size of the drilling unit? A. I said what, now?

Q. Price was an element to be considered in determining the size of the drilling unit. Do you recall that? A. Yes, sir, I think it is, yes, sir.

Q. What is that? A. I don't know whether that was considered at the time it was spaced, because I wasn't on the Commission, but I think price definitely enters into the economics of drilling a well, and in the size of the unit.

Q. Correct. Whether it is on 40 acres 160 acres or 640 or larger? A. Yes, sir.

Q. With the size established of 640 acres, and that to remain constant for the future, I mean so far as the present indication is concerned, the drilling of a well on that unit today is governed by the rule established by the Commission and not by the price? A. Yes, sir, I think the price probably entered into it.

Q. Do you know? A. I don't know. I couldn't say because I wasn't a member of the Commission at the time, but it was our custom to consider price.

[4766]

Q. Well, price in relation to what? A. Price in relation to the fixing of spacing units in connection with the economics of the venture.

BLEED THROUGH

BLURRED COPY

Q. I mean the economics of the venture would involve the cost of drilling the well, or a well? A. A well.

Q. Well, there is a wide variation in that? A. Yes, sir.

Q. There is a wide variation in the volume of gas you can expect to produce from a well? A. There is a variation in the amount of gas in place, the amount you can expect to recover.

Q. How do you equate all of those, or do you? A. We usually consider the amount of recoverable oil or gas and various and sundry things enter into that.

* * *

[4770]

Q. I mean from the standpoint of conservation you have to provide that unit which will effectively recover the gas and oil underlying the structure? A. And maintain that same pattern and uniformity of size and shape throughout the entire pool.

[4771]

Q. So that there the element of consideration is the recovery of the gas or the oil? A. That is right.

Q. And price doesn't enter into it there? A. Well, it does enter into it, too, in the matter of original setup—

Q. (Interrupting) I mean you can't do anything without money, that is true— A. (Interrupting) In fixing the original pattern, we do take into consideration the economics of it.

Q. But it has been established already? A. After it is established, we don't take into consideration the price, no.

* * *

[4776]

MASON WALTERS

resumed the stand, and having been previously duly sworn, was examined and testified further as follows:

Direct Examination (Resumed) by Mr. Perdue

* * *

[4780]

Q. Each and every one of these maps or diagrams, that is to say, Exhibit 1-A, 12-A, 13-A, 14-B and 15-A which we have been discussing are corrections or modifications of maps and diagrams which have already been received in evidence in this proceeding, is that not correct? A. That is correct.

Q. And the modifications and corrections that you have made upon these maps were gained by you from maps supplied at your request by the Phillips Petroleum Company? A. That is true for—

Q. (Interrupting) Excepting Exhibit 1-A?

[4781]

A. That is right.

Q. And the information for Exhibit 1-A was gained by you from the files of the Federal Power Commission? A. That is correct.

MR. PERDUE: That is all the questions I have.

Mr. Examiner, I now offer Exhibits 1-A, 12-A, 13-A, 14-B and 15-A into evidence in this proceeding.

* * *

BLEED THROUGH

BLURRED COPY

[4782]

MR. SPARKS: I have no objection, Mr. Examiner.

PRESIDING EXAMINER: Does anyone else have any objection to these exhibits?

(No response.)

PRESIDING EXAMINER: Exhibits 1-A, 12-A, 13-A, 14-B and 15-A are received in evidence.

[4783]

* * *

GEORGE P. BUNN

resumed the stand, and having been previously duly sworn, was examined and testified further as follows:

Cross-Examination (Resumed) by Mr. McAllister

* * *

[4805]

Q. What would a distribution line be, then? A. That would have reference to someone who takes gas from some source and distributes it, you might even say that some of these lines in the broad sense distribute gas to the various points of disposal, but the operation in the sense of our business is gathering to those points of disposal.

Q. According to your statement that gas to the camp there could be called either a gathering or a distribution line? A. You can call them a lot of things if you want to.

Q. I mean according to your concept they would right-

fully be so termed? A. Not as we ordinarily use them and think of them in the business.

Q. This would be a gathering line distinctly and not a distribution line according to your concept? A. That is right. If we had a system of lines in a town someplace we might call those distribution lines.

[4806]

Q. And out in those camps, I suppose you have facilities there, water heaters and stoves and it is gathering lines right up to the burner tip in those camps? A. It is the gathering up to the point where the occupant uses it, yes.

Q. Well, if Phillips is the occupant in that—no, particular one is assigned there, let's say a general utility building that is operated by Phillips, it is gathering right up to the burner tip where the flame is lit? A. Yes, I'd say so, just like it would be disposal in the same sense where it is burned under the boilers in the plant.

Q. Yes, or the flare gas? A. That is correct.

Q. That is still a gathering line forty feet up in the air where the gas is vented or flared? A. That is right.

Q. Out of this Goldsmith plant? A. That is right, that is the point of disposal of that gas, and that is a required function in a number of our plants to get the gas away from the leases even if it has to be vented.

Q. By and large the determination of what constitutes gathering in any plant is based upon the contract that you

[4807]

have for disposal of the gas? A. No, I wouldn't say so.

BLEED THROUGH

BLURRED COPY

Q. Well, if you had to treat the gas and you do treat it, then the treater is a part of your gathering? A. That is one disposal, yes, that would be one.

Q. (Interrupting): I mean that is fixed by contract and that is the only reason you do it? A. For one disposal, but there is more than one disposal in any plant.

Q. Now, you stay down to the question I have and I think we'll make more progress. In the Crane plant, you have no obligations to remove any sulphur at all? A. That is correct.

Q. And in other plants you do remove the sulphur to a certain extent. A. In some plants we do, yes.

Q. And that sulphur removal is a part of gathering because you are required to do it by your contract of sale. A. Whenever it is a requirement for a particular contract, yes, that is the conditioning of the gas for its disposal as part of the gathering.

Q. And that is primarily, then, fixed by contract? A. Well, for one particular sale where a contract requires that, that would be true to you, but for any

[4808]

other disposal in the plant it might not be true.

Q. Well, that is true where you bring the gas back to your own camps. A. Or you vent it or burn it under boilers or return it to a lease, you may not be required to remove the sulphur, or dehydrate it.

Q. But your obligation to return to the lease is a contract obligation? A. That is correct.

Q. And because you have that obligation that makes

the lines leading back to the lease gathering lines? A. That is right, partly, part of the gas goes to our own properties and is not a contract obligation.

Q. No, but to the extent that you have a contract which obligates you to return gas to the leases, it is a gathering line because of that obligation which you must fulfill? A. Well, it is a gathering line because of the function it fulfills, whether it is in the contract or not.

Q. Well, if you sold it to somebody for lease use, would that still make it a gathering line? A. Yes.

* * *

[4872]

Q. That [Exhibit 45-B] is a plant diagram of the Sneed plant, is it not, Mr. Bunn? A. Yes, sir.

* * *

[4874]

Q. The gas that goes to the 2-inch line there, fuel gas to the office, that is a Phillips building? A. Yes.

Q. And that is one of those places where the gathering line runs, according to your concept, clear down to the burner tips? A. Yes, the gas runs to the burners.

Q. I know, but I mean the gathering lines according to your testimony is that all of those lines right up to the burner tips are the gathering lines? A. Yes, that is one of the points of disposal of the gas going to the plant.

Q. And those lines to the camp and the lines carrying fuel back to the compressor building and to the boiler house, all those lines are gathering lines? A. Yes, those are all gathering lines, because they carry part of the gas

BLEED THROUGH

BLURRED COPY

entering the plant to the points of disposal just as a part of the gas is disposed of in the plant by the extraction of gasoline.

Q. Well, we have not gotten that far yet. A. Well, I have. That is one of the points of disposal.

[4875]

Q. We'll follow that gas over to Panhandle and back again, but I'm talking about the 6-inch line to plant which is metered into the compressor building and also into the boiler house. A. That is what I'm talking about, because the gas in the reabsorber which, as you have pointed out has not been in an absorber before, in the 6-inch line, is an extraction of gasoline, accomplishes an extraction of gasoline from the gas in that line that moves to the reabsorber.

Q. Well, what I am referring to is 6-inch fuel gas to plant, do you see that? A. Yes.

Q. And it leads over with a take-off at right angles down to the boilerhouse? A. Yes, sir.

Q. And those gathering lines are the lines and— A. (Interrupting.) That is the correct term.

Q. The lines leading to the burner tips in the boiler house? A. Yes, up to the burners, that is right.

Q. Well, it includes the burners, doesn't it? A. I think that it is reasonable to say that gas is disposed of when it enters the burner. It is no longer recoverable, it is disposed of at that point, whether it

[4876]

burns or whether the fire is out, if the gas is flowing.

* * *

[4909]

Q. No, I'm finishing it. The gas, once the plants are in operation, represents the continuous moving and processing and handling of the gas, is that right, just as though these entire facilities all belong to Phillips? In other words, the operation is coordinated to maintain a continuous operation? A. Yes, presuming that the plants will handle gas every day, twenty-four hours a day, but they don't always do that. There may be accidental interruptions or something of the kind and there is no requirement that Panhandle Eastern should continue to deliver gas to Phillips if it ceased bringing gas to its compressor station there.

* * *

[4911]

Q. So when you begin talking about the plant running continuously except when you have these unforeseen accidents, you mean by that that this plant regularly operates and is expected to operate twenty-four hours a day three hundred and sixty-five days in the year and it

[4912]

does so operate with only very, very minor interruptions? A. Yes, I think that is a very fair statement of it.

[4913]

* * *

Q. (Interrupting) All I'm trying to say is that that gas

BLEED THROUGH

BLURRED COPY

[4914]

comes to you just as continuously and without interruption as if you were operating the compressors? A. Well, it comes to us continuously whoever is operating them.

Q. Whoever is operating them. Well, that is all I'm trying to get at, is that this is a coordinated operation that works as smoothly or effectively as if it was all under one roof and operated by one person? A. That is just the same as any of our gasoline plants. The producer supplies gas, and as long as he does it flows continuously to the plant. It is the same thing here, as long as Panhandle Eastern operates and the gas flows to us, why, it is all continuous and you'd say it would be coordinated.

Q. I'm not trying to get you to say you are doing a better job or poorer job than anybody else or that Panhandle is doing a better or poorer job than anybody else, but I'm trying to get you to say with respect to this operation, the coordinated operations of both are such that it is continuous and is not interrupted in the fashion which I stated a moment ago. A. I said the operation, I can say, is continuous except for very minor interruptions.

* * *

[4936]

Q. Will you turn to Exhibit 45-C, Mr. Bunn, which is a diagram of the plant lay-out known as the Gray plant? A. Yes, I have that.

Q. That map isn't quite as fancy as some of the others we have. Let me ask you this, if you are familiar with that plant lay-out there, are all of those lines which you

see there as being solid lines the gathering lines as you have defined them and as you understand them? A. As far as I can distinguish from the Exhibit 45-C the pipe lines depicted thereon as solid black lines are gathering

[4937]

lines.

* * *

[4943]

Q. You have the Independent Natural Gas Company purchase meter. Do you note the location of that purchase meter? A. Yes.

Q. Is that the point at which you deliver gas to the Independent Natural Gas Company? A. No. I believe the gas is delivered to them off the absorbers at the regulatory back pressure regulator.

Q. What kind of a line is that in there, then? Is that a gathering line between that point and the meter? A. That is Independent Natural Gas Company's line. The metering is done at the point indicated as Ind. Company gas purchase meter.

[4944]

Q. Is that line not the line of Phillips from the regulator out to the purchase meter? A. No, sir.

Q. Well, they own that line on Phillips property, then, back to the back pressure regulator? A. I think that is right. I haven't checked the lines here for a long time, but I think that is right, and that is the way the sketch indicates it.

BLEED THROUGH

BLURRED COPY

Q. According to your concept, then, in this case the delivering lines, the gathering lines, terminate there at that back pressure regulator? A. Our gathering lines would terminate at the point where we deliver the gas to Independent.

* * *

[5022]

Q. Now, I want to find the flare you had on Exhibit 101. It is right of the middle and above the middle of the exhibit or the picture, isn't that right, right near the arrow heading north? A. Just south of that arrow, that is one of our flares, yes.

Q. Do you have more than one flare on this picture, Exhibit 101? A. Yes.

Q. That is one of them? A. Yes.

Q. That is the one that looks like a may pole? A. Yes.

Q. And that is a gathering line?

[5023]

A. It is, yes, up to the point of disposal of the gas into the fire.

Q. Where is the other flare you have on there? A. It is right near the middle of the photograph at the bottom part of the picture, right at the edge of the darkest area.

Q. It seems to be a much higher flare line. A. That is because it is closer to you.

Q. I see. And that is a gathering line, too? A. That is right. It performs the function of disposing of gas at times.

* * *

[5078]

MR. JOFFEE: Mr. Examiner, Mr. McAllister has yielded to Kansas City to ask a few questions of Mr. Bunn at this time.

PRESIDING EXAMINER: Very well.

Examination by Mr. Joffee

* * *

Q. What is done with the gas before it is delivered to Cities Service Gas Company at the East Edmond field? A. The gasoline is extracted from it as it comes from the

[5079]

wells and leases, and it is dehydrated in at least one plant, I think in both plants where we are delivering gas to Cities Service, but I know it is in one.

Q. There are two gasoline plants operated in connection with the East Edmond field, is that correct? A. With the East Edmond field?

Q. Or do you call it the Edmond field? A. Well, there are two adjacent areas, one called Edmond and the other West Edmond.

Q. In addition to the operation of the gasoline plants and the extraction of gasoline is there not one or more compressor stations operated at that field? A. There are on the gas which is gathered in the field in connection with those plants, yes.

* * *

Q. Well, will you explain how the compressor stations are operated? A. Well, there are some of them outlying

BLEED THROUGH

BLURRED COPY

in the field area and some of them in the plants, but they are all operated to compress the gas prior to the extraction of gasoline.

Q. The residue gas is delivered to Cities Service Gas

[5080]

Company at about 500 pounds per square inch, isn't that correct? A. A little higher than that—

Q. (Interrupting) 550? A. It is processed a little higher than that. About 500, I think, is right, yes, at the delivery.

* * *

Q. In other words, the compressing of gas to such pressures as 500 and 550 pounds per square inch, in your opinion, is considered part of the process of gathering the gas, is that true? A. Yes, it is a part of the process of gathering in that it is conditioning gas for disposal.

Q. By disposal you mean the sale in this instance to an interstate pipe line? A. To any purpose where compression is necessary. The purpose in gathering is to collect the gas, condition it and move it to points of disposal. That is the operation.

* * *

[5082]

Q. Well, does Phillips operate that particular plant or it is some other company? A. Phillips mechanically operates it, but the ownership is diverse.

Q. But Phillips is the seller of the gas to Cities Service Gas Company, is that not true? A. On its portion of ownership of the gas.

Q. Isn't the contract with the Cities Service Gas Company made by Phillips as the seller, the contract that is in evidence in this case? A. The original contract for the sale of gas from the plants in that field were made by the partners in the plants, but the sale of gas currently is by the owners of the gas.

[5083]

Q. You didn't answer my question, Mr. Bunn. A. That is the best I can answer.

Q. Do you mean to say the contract here in evidence relative to the sale of gas to Cities Service Gas Company is not made by Phillips as the seller? A. I don't know what is in evidence in total here as exhibits, but I know that the gas is sold to Cities Service by the owners of it in the West Edmond field.

* * *

[5085]

BY MR. McALLISTER:

* * *

[5097]

Q. What are the lines that connect the casing through the separator and what-not, what are they? A. I would call them producing facilities.

Q. What are included in those producing facilities that you are talking about? A. Oh, producing facilities would consist of the well itself and all equipment in connection with it in the well, in the hole, the bore, the equipment on

BLEED THROUGH

BLURRED COPY

top of that well, which might control it, which might include a derrick over it, it would include the lead line from the well to a separator if a separator were installed, it would include the separator itself, and the control equipment on it, and tankage even in connection with it, that would all be and is considered in the industry generally as producing equipment. It might include a treating plant.

Q. Do you have any writing on that or is that just your word of mouth concept, an expression of your concept of what it is?

MR. SPARKS: May we have the question read?

PRESIDING EXAMINER: Read the question.

(Question read by the reporter.)

BY MR. McALLISTER:

Q. I mean you stuck it in there as a gratuitous statement, and I want a definition of it now. A. I didn't stick it in as a gratuitous statement.

[5098]

Q. You said "It is my concept and understood in the industry", and I'm asking you if you have any writing on that which shows that it is the concept in the industry? A. Nobody ever wrote me a letter to—

Q. (Interrupting). Nor, I mean anything in writing or printed that shows that description of facilities. A. I'm sure I have something in that connection if I reviewed it and went through all I have. It might show that in printing or something of the kind, but I know that is what our production department considers the facilities.

Q. When you limit it to yourself and your company

I haven't any objection, but when you include it in the industry and if you insist on that, then I'd like to have you produce something in writing as some authenticity representing the industry, not currently but in the past when this issue was not present? A. You know what an industry may consider and classify lots of times without having it in writing.

* * *

[5115]

Q. Well, then, we can get it down to this process, whatever you are required to do to process the gas under these gas purchase contracts or whatever you elect to do in a gasoline plant along with that processing, and as a part of the total processing, that is all a part of gathering and within your concept? A. In general I think that is correct, if it is done for disposal and prior to it, it is part of gathering.

Q. And then on beyond that the gas passes out of the gasoline plant and is transported for some distance—nothing to be done in that thousand feet or whatever it is outside the plant, but that is still part of the gathering up to the point of actually delivering it to the purchasing company and where we are concerned here it is El Paso, Panhandle, Michigan-Wisconsin, Independent Natural Gas Company or Cities Service? A. Yes, if it is in or near the area of production.

Q. In or near, now we have a new term. How far is it in or near? A. I don't know. That in is clear, within the confines of the area of production. The limits of it, near is a term that is difficult depending on circumstances.

Q. You say area of production?

BLEED THROUGH

BLURRED COPY

[5116]

A. Yes.

Q. That might be 25 miles away? A. No, I wouldn't say so. It is within the limits of the production from which the gas comes.

* * *

[5119]

Q. Well, I don't know, but they have some facilities there for compression and so on, and those are gathering lines of Panhandle also carrying it into the, gathering it into, their compressor station and other facilities adjacent there, are they? A. Do you mean at Hansford plant?

Q. Yes. A. Of course, Panhandle Eastern doesn't have any equipment that I recall right at the Hansford plant except the pipe line—

Q. (Interrupting) Well, let's call it a pipe line, it goes into a pipe line, is that a gathering line for Panhandle to take the gas into their next plant? A. No, it isn't a gathering line in the sense of my

[5120]

concept of gathering, as understood in this industry.

Q. It isn't? A. No, it doesn't gather gas from wells and leases.

Q. If Phillips lines were to go out there another half mile to a point of connection, this is an assumption now— A. (Interrupting) From Hansford plant?

Q. From Hansford plant, in addition to the area there they transport, you had another half mile out there that

would still be gathering no matter what the distance? A. I won't say no matter what the distance, no, but if it is a half mile, I'd say, yes, it is still gathering. You don't gather out in the middle of the lake, as you said one day, you have to gather for a purpose and that is a disposal, and gathering goes to that point or those several points of disposal.

Q. Including the vent stack up in the air forty feet? A. Yes.

Q. The sales meter there that is on that line, is that a gathering facility? A. It is if it is Phillips Petroleum Company's.

Q. It is a gathering facility if it is owned by Phillips? A. Yes, because it is a part of the facilities that are required before disposal.

Q. If the facilities are owned by the purchasing company than what are they, the gathering facilities? A. No, they would not necessarily be gathering facilities.

[5121]

They might be incidental gathering facilities depending on where the point of delivery was in that installation.

Q. If the point of delivery is beyond the meters and the meter runs? A. Then they would be incidental gathering facilities.

Q. Whose are they? A. Well, they are not Phillips Petroleum Company's. They are incidental facilities.

Q. They are incidental facilities. Then the point of sale is beyond the Phillips ownership of facilities if the meters are owned by somebody else? A. They might be. I say they might be, at the outlet of meters, for instance,

BLEED THROUGH BLURRED COPY

owned by somebody else.

Q. Under those circumstances is the sale a part of the gathering? A. The sale is an incident to gathering, just like the purchase of the gas.

Q. I said it is a part of gathering? A. It is an incident to it.

Q. It is not a part of it, though? A. It is not a mechanical thing, the sale itself, it is not a facility, no.

Q. You make a sale to El Paso. Is that sale a part of the gathering according to what you are saying? A. It is an incident to gathering. It occurs at the end

[5122]

of gathering.

Q. Gathering has been completed before the sale? A. It is an incident to that gathering.

Q. Just answer that question? A. No, sir, it is an incident to gathering. The one can't start beyond the point if the two begin at the point.

Q. They are simultaneous, then? A. They are simultaneous.

Q. The end of the gathering, the sale and the beginning of transportation, all three are simultaneous at one time? A. No, not necessarily.

Q. What is the gap between the end of gathering and the beginning of transportation? A. The end of gathering—

Q. (Interrupting) The end of gathering and the beginning of transportation, what gap is there between those two? A. The end of gathering is at the point of disposal.

• • •

[5127]

Q. So there the question of gathering is determined by the contract? A. In a considerable measure, yes.

Q. Well, entirely so far as the return and extraction is concerned? A. So far as that part of it is concerned, yes, sir.

• • •

[5133]

Q. We went through that yesterday. If the delivery point is down there where the meter is it would be gathering that far? A. Well, I don't know whether it would or not. The actual point in the reality of disposal by the gatherer insofar as he has custody over it would be at the point where his facility ends and the other fellow's begins.

[5134]

Q. Well, let me get at this thing, change of ownership has everything to do with it, then, is that right? A. As far as the functions of the gatherer himself is concerned.

Q. It does? A. Yes, what he is performing, what he is doing is a reality.

Q. If you ask a gatherer, as you have used the term here, brought the gas up to the inlet, up to the fence line, of the Sherman plant and there turned it over to Michigan-Wisconsin and delivered it to them at that point, then, your gathering would be completed at the fence line, and I mean just exactly as your facilities are laid out there today as the various lines, you own them up to the various points at the fence line—

BLEED THROUGH

BLURRED COPY

A. (Interrupting.) Our gathering would end at the point we dispose of the gas to Michigan-Wisconsin, yes.

Q. Right at the fence line? A. Well, wherever we actually dispose of it.

Q. What I was making clear was that the lines as they are now laid out, where they cross the fence line coming into the plant, and you disposed of it on those various lines as it came into the plant, that would be the end of your gathering? A. I'm not sure I understand. You say coming into the

[5135]

plant?

Q. I mean the lines from the field come up to the fence line as they come in the plant? A. Converge in the plant?

Q. Yes. A. Would you restate your question, now?

Q. And under those circumstances you were selling and delivering the gas to Michigan-Wisconsin at the fence line, no matter what line it was coming in on. A. If we were selling it at that point?

Q. Yes, yes. A. If we were actually delivering it to them—

Q. (Interrupting) I mean actually delivering it to them, then. A. If we were actually delivering it and disposing of it to them.

Q. At those points. A. At each of those points.

MR. SPARKS: And the facilities beyond that point were there?

MR. McALLISTER: Yes, all the facilities beyond those points belonging to Michigan-Wisconsin.

A. Each of those points, up to those points would be gathering.

MR. McALLISTER: And beyond that would be something

[5136]

else— A. (Interrupting.) It would be theirs, not our gathering—

Q. And when you say our, you mean Phillips Petroleum? A. That is right.

• • •

[5211]

Q. I show you the official copies of Exhibits 51, 50, 49 and 48, and will you examine those exhibits, Mr. Bunn, and then I have a question that I would like to put to you when you have had an opportunity to look at the exhibits. A. Yes, I have reviewed them.

Q. The question is this, do you base your answer that the lines shown on those exhibits are gathering lines within the meaning of the term "gathering lines" as used in the industry, the question is, do you have any treatise or documentary support for that statement as to the practice in the industry wherein the question of the proper designation of those lines is under discussion and not merely the incidental use of a descriptive term as referring to the lines? A. I'm sure that given time enough I could find—

Q. (Interrupting.) You say you could find them. I asked you if in making that answer you based it upon such written evidence of classification within the industry. A. I had in mind that in communication among units

BLEED THROUGH

BLURRED COPY

[5212]

of the industry words are used, terms are used, such that there would be no doubt but what it is this type of line as expressed in these exhibits that would be called gathering lines by others in the industry. I also had in mind many contacts with people in the industry from day to day over the properties, looking at our lines with them and looking at their lines and referring to them regularly as such, as gathering lines, as depicted on these exhibits. It is a matter of acquiring a broad knowledge over a period of years, not from written things necessarily but let us say confirmed in part in written matter.

Q. But your answer here, as I understand what you now say, is it is based solely upon your own personal impression, gleaned, as you say, from contact with people who are members of the industry and not upon any written treatise or considered document wherein the discussion had for determination the proper naming of lines of this character? A. It has been both. It has been—

Q. (Interrupting.) Would you refer me to one of these documents that you say exists? A. I say you give me time enough and I can—

Q. (Interrupting.) I mean how much time do you want? A. I don't know. I had never thought of seeking all those things, but I know I have them in the past over a long period of time. I undoubtedly have books on it from

[5213]

which I could cite you examples in addition to correspondence with others from other concerns in this industry.

Q. Can you do that by tomorrow morning? A. What is that?

Q. Can you do that by tomorrow morning? A. No, I couldn't.

Q. It is not that readily available? A. Just because there has been no reason for accumulating any such information on that. I'd have to make research on it just as you or anyone else would. It could be done, I'm sure, in time.

Q. How much time? A. I don't know. I have done jobs of that kind on other occasions for other purposes and I know you can not estimate very well the time to present comprehensive and voluminous citations.

Q. But you haven't done that in the statements you have made here? A. No, I haven't. I didn't think it was necessary. I just know it.

Q. As a matter of fact, if others in the Phillips organization, as they have in this docket, have testified, then in your opinion they don't know what they are talking about? A. If what, did you say?

[5214]

Q. If others who are employees in the Phillips organization in testifying in this docket have otherwise classified these lines and referred to them, then they don't know what they are talking about, is that your— A. (Interrupting.) Well, I would say that anyone that might have said that, they might not have been well versed in it. I don't know. I don't remember who all might have said it. They might have been mistaken.

BLEED THROUGH

BLURRED COPY

Q. And they might have been talking offhand, too, and using the usual terms that they do in their day-to-day business, is that right? A. They might have used other words, they have used other terms, than gathering lines. As I said myself, there are other terms that are used for all of these lines, even these interstate pipe lines, there is not the same word or same term always used by everybody to refer to them.

Q. That is right. A. But in the case of these gathering lines, so far as I can recall in the history of the business, people in this business in all kinds of companies, in communicating with each other and dealing with each other very regularly use the terms gathering lines in referring to them as they are depicted on these exhibits.

* * *

[5268]

Redirect Examination by Mr. Sparks

Q. Mr. Bunn, will you turn to Exhibit No. 111? A. Yes, I now have Exhibit 111.

Q. In the lower right-hand corner of that exhibit, Mr. Bunn, there is a gray arrow labeled "Texroy Booster". Do you find that? A. Yes.

Q. What is the function performed by that Texroy Booster? A. That booster collects the gas from the wells at that point, draws the gas from the wells, elevates the pressure and pushes it on its way into Pantex Natural

[5269]

Gasoline plant.

BY MR. McALLISTER:

Q. It pushes into what plant? A. Pantex gasoline plant.

Q. Where is that? I see it, never mind.

BY MR. SPARKS:

Q. And at the lower part of the map, just below the Hutchinson-Carson County line, do you find a gray arrow labeled "Carson Booster"? A. Yes, sir.

Q. What is the function performed by the Carson Booster? A. That is similar to the function performed by Texroy Booster.

Q. Are those two boosters gathering facilities? A. Yes, sir.

Q. They are not pipe lines, though, are they? A. No, not altogether. There are some pipes around the plants, some lines, but they are more than that, they are gathering facilities.

Q. You have previously testified, I believe, that the red lines on this Exhibit 111, which is an exhibit of the Borger-Moore County area, are raw gas gathering lines, have you not? A. Yes.

[5270]

Q. Are there in that gathering system other mechanical devices that are not pipe lines as such? A. In those gathering facilities?

Q. Yes. A. Yes.

Q. Can you name some of them?

MR. McALLISTER: We are talking about the Borger plant, are we?

BLEED THROUGH

BLURRED COPY

MR. SPARKS: No, I'm talking about the raw gas gathering lines shown in red on Exhibit 111.

MR. McALLISTER: Might I get one point clear? There is red on here of different shades. Which ones are you talking about? Are those lines supposed to be different or is it just one fellow has been using poor ink of some kind?

BY MR. SPARKS:

Q. Go ahead and answer. A. Let us say that we are referring to what I might call the bright red or the carmine lines. There are some other colored lines there which are not what I would call bright red, they are more of a tan, they may be a shade of red, but the bright red lines are the lines to which I'm referring.

Q. Mr. Bunn, the line down at the bottom of the map which is labeled "From Plains Water Station", that is a water line, is it not?

[5271]

A. Yes, and that is one of the lines I'd refer to as tan.

BY MR. McALLISTER:

Q. That is a gas line, though? A. That is a water line, and I'm not referring to that as a red line. That is what I mean.

Q. I mean there is nothing on here that says it is a water line. It is the first time it has been described as such? A. It is a water line and the legend indicates that the color shown on there is a water line.

BY MR. SPARKS:

Q. It doesn't appear to be red to you, does it? A. No, I would call it tan.

MR. McALLISTER: It appears to be red to me. I was wondering why colors so similar were selected unless it was to confuse.

BY MR. SPARKS:

Q. Did you select the colors so they would be confusing there, Mr. Bunn? A. No, as a matter of fact I didn't select the colors, and in daylight these contracts are much better than they are under this light.

MR. McALLISTER: We just hope that the Commission can look at them in daylight, then.

[5272]

BY MR. SPARKS:

Q. Mr. Bunn, would you answer the question I asked you before I was interrupted? A. I believe you were asking me some of the facilities there might be in the gathering facilities that are not pipes or pipe lines. Well, let's see, there are metering, for instance, which are part of the gathering facilities. There are many meters. There are meter instruments and such appurtenances in the meter houses. There are drips all along these lines at different points to remove condensed liquids from place to place. In connection with the operation of the lines there are houses of the employees that are necessary to the gathering and we regard as part of those facilities. They might be considered incidental to gathering, of course, because they take no direct part in it. There are offices at several points around the area for the people who care for the gathering facilities. There are compressors such as I have indicated in Carson and Texroy Boosters, and, of course, other ap-

BLEED THROUGH BLURRED COPY

purtenant facilities in those plants such as cooling towers and buildings to house the engines and compressors, water tanks, instruments for measuring pressure and temperature and such things of that. There are a number of items that would not be called pipe lines.

Q. There are water lines to those compressors, are there not? A. Yes, there are water lines to serve those engines and

[5273]

compressors. They are part of those facilities.

Q. Are all of those facilities gathering facilities even though they aren't pipe lines? A. Yes, we regard them all as gathering facilities because they take part in the operation of gathering.

MR. McALLISTER: Might I ask a question there; He left out valves and I was wondering if there was any reason.

BY MR. SPARKS:

Q. I'll ask him. Was there any reason for leaving out valves? A. No, I didn't consciously omit valves. There are many kinds of fittings involved there, there are relators and valves all over the system at different points. Valves, at least, are sort of part and parcel of pipe lines and I didn't think to mention them, but there are valves all over and, of course, valves in these booster plants, regulators of one kind and another.

Q. Gathering facilities are not limited to pipe lines or pipe, are they, Mr. Bunn? A. They certainly are not.

Q. If all you had was pipe and nothing else, why, you

just probably couldn't operate, at least you'd be definitely handicapped in the operation of the collection of gas, would you not? A. Well, I can hardly imagine a gathering operation so simple that there was nothing but pipe in it. It certainly would

[5274]

have some valves or some other fittings.

Q. Now I'd like for you to turn to Exhibit No. 104. Exhibit 104 is a map of the Pampa area, including Gray County and parts of Wheeler, Carson and Hutchinson County, is that correct? A. Yes, parts of those counties.

Q. I note on this exhibit in a portion of the lower left-hand corner an arrow that is labeled "Annie Booster". Do you see that? A. Yes.

Q. What is the function of that field booster? A. That is a part of the gathering facilities for gathering gas.

Q. What does it do? A. It draws gas from two leases in the area nearby and elevates the pressure into another line nearby which is collecting gas from other wells in the vicinity. In this case the Annie Booster is picking up casing-head gas at relatively low pressure and elevating its pressure to oppose the pressure in the line into which it is delivered which is serving principally otherwise wells which produce natural gas only.

Q. And that line into which the Annie Booster delivers this casing-head gas furnishes a portion of the gas processed at Pampa, Bowers and Gray plant, does it not? A. You say the line into which the Annie discharges?

BLEED THROUGH BLURRED COPY

[5275]

Q. Yes. A. A portion of Pampa—beg pardon?

Q. Pampa, Bowers and Gray plant. A. Yes, that is right, that gas collected in that area through the Annie Booster and its compressors and from the dry gas wells in the area otherwise at natural well pressure is delivered in part to Pampa, Bowers and Gray plants.

[5276]

Q. Now, to the east in Wheeler County, I notice a gray arrow on the map designated "Wheeler Booster". A. Yes, sir.

Q. What is the function of that booster? A. That is a part of the gathering facilities supplying gas to Gray plant and Lefors plant. Its purpose is to draw gas in from the various wells and leases on the downstream side and elevating that pressure, the pressure of that gas, so that it is sufficient for the pipe line, the gathering line from that point on in, to Gray plant and by Lefors to transport the gas as a part of the collection there that is available.

Q. And part of the gas that is boosted at the Wheeler Booster is taken over through a tie-over and processed at the Lefors plant? A. Yes, sir, a part of that gas is taken off there and other gas from local areas about Lefors is also processed in Lefors.

Q. And the gas that is compressed at the Wheeler Booster is partly casing-head gas, is it not? A. That is correct.

Q. And the gas that is compressed in the Wheeler Booster that is not taken off at Lefors plant goes on down

the pipe line in a westerly direction and at a point three or four miles west of the Lefors plant I observe

[5277]

a gray arrow marked "Red Booster". A. Yes.

Q. What is the function of that booster? A. That booster has the same function as Wheeler Booster for gas in and around the Red Booster, except that the gas which is discharged by Red Booster into the adjacent gathering line into Gray Plant all goes to Gray plant and none of it to Lefors plant.

Q. Is that Red Booster a gathering facility? A. Yes, sir.

Q. But it is not pipe line? A. Well, no, the booster in its entirety certainly is not a pipe line.

Q. I believe you have heretofore testified that the red lines on Exhibit 104 were raw gas gathering lines, did you not? A. Yes, I have. I was just looking to see if there was any other confusion of shades here to contend with, but it seems to me they are clear here, that they are still bright red lines and I don't believe there is much confusion with any other shade. They are gathering lines.

[5278]

Q. And do they have there in that system of gathering lines the other mechanical installations and devices which you said were utilized in connection with the raw gas gathering system shown on Exhibit 111? A. Yes. I believe in this system, yes, all of the things I named otherwise are somewhere found in these facilities, among these facilities.

BLEED THROUGH

BLURRED COPY

Q. And are such facilities gathering facilities although they are not gathering lines? A. Yes, they are all part of the gathering facilities.

MR. McALLISTER: Mr. Examiner, of course, the witness is testifying to conclusions, and I want it recognized on the record that when someone tries to find out a little later on, he may also be asked to express conclusions.

BY MR. SPARKS:

Q. As you have stated in your testimony here this morning that certain facilities were gathering facilities or gathering lines, state what was the basis of your testimony in that regard. A. Well, that is what we regard them as and what we call them in our operations. We have for years more often than otherwise referred to those facilities in the aggregate as part of the gathering facilities. We also know that they are so considered and regarded by, I'd say, the industry generally because we know from our contacts and our operations jointly with others that they regard the facilities in the same way as we, and so classify

[5279]

them.

Q. That is the basis of your testimony? A. That is right.

Q. Very well. Now turn to Exhibit 91. This exhibit is a map of the Goldsmith area in Ector and adjoining counties in West Texas, is it not? A. Yes. It is a map showing portions of Andrews, Crane, Ector, Winkler and other counties, but principally the area surrounding what is termed the Goldsmith area.

Q. And also the area surrounding the Judkins plant? A. Yes, and the other features shown on it.

Q. There is on the exhibit an orange arrow which is labeled "Harper Booster". Do you find that? A. Yes, sir.

Q. Assuming that that Harper Booster is performing the function of compressing the gas collected through the red lines shown on the map to lead into the booster, and moving it through the red line leading to the Judkins plant, is that a gathering facility, the Harper Booster—

MR. McALLISTER (interrupting): I object, Mr. Examiner.

BY MR. SPARKS:

Q. (Continuing)—within your concept of gathering facilities as you have defined it here and as it is understood in the industry?

MR. McALLISTER: I object, Mr. Examiner. In the first place,

[5280]

he asked the witness to presume something that he is presumed to know in this record. In the second place I object to him attempting to speak for the industry. He is not qualified in anyway to speak for the industry. He can speak for himself. He has not shown himself by anything that has been demonstrated here that there is any understanding in the industry that he is the spokesman for the industry.

MR. SPARKS: Mr. McAllister knows that is not a valid objection.

MR. McALLISTER: I do know it is a valid proposition.

MR. SPARKS: No one is attempting to have the wit-

BLEED THROUGH BLURRED COPY

ness speak as a spokesman for the industry, of course. It is not the basis of his testimony, and I think it is perfectly obvious that a man who has had the experience in the business and in an industry is qualified to speak concerning the understanding of the industry with reference to the meaning and use of terminology. There isn't any question about that whatever, and that is the sense in which the questions in that regard have been asked and answered.

PRESIDING EXAMINER: I don't know about the understanding, but it seems to me he would be qualified to testify as to the use of terminology within the industry.

MR. SPARKS: That is the basis upon which he has been testifying.

MR. McALLISTER: There are individuals in the industry

[5281]

that have an entirely erroneous concept.

PRESIDING EXAMINER: There are individuals in the industry, you say?

MR. McALLISTER: Yes.

PRESIDING EXAMINER: I think that is probably true.

MR. McALLISTFR: It is just like some people are known by certain names, but that doesn't mean that is what they are.

PRESIDING EXAMINER: I think that goes to the weight of the evidence rather than the qualifications of the witness or the competence of the evidence.

MR. SPARKS: I'll withdraw the question. I want to

ask Mr. Bunn if he knows the operation and functions performed by the Harper Booster.

THE WITNESS: I was uncertain a day or so ago. I had forgotten which way we switched that plant, as I believe I testified. It is operating as a booster station moving gas into Judkins plant.

[5282]

BY MR. SPARKS:

Q. No processing is done at the Harper Booster? A. No, sir.

Q. Within your concept of the gathering function and your understanding of that concept as it is known and understood in the industry, is the Harper Booster a gathering facility? A. It is.

MR. McALLISTER: I object, Mr. Examiner. Of course, the witness has answered the question when he heard me voicing my objection.

PRESIDING EXAMINER: Strike out the answer.

Let's divide that into two questions.

Read the question, please.

(Question read by the reporter.)

MR. SPARKS: All right.

BY MR. SPARKS:

Q. Within the concept of gathering as it is known and understood in the industry—

MR. McALLISTER: I object, Mr. Examiner. It is an oft repeated—

MR. SPARKS: (interrupting): Let me finish the question.

BLEED THROUGH BLURRED COPY

MR. McALLISTER: I mean it is five minutes since you stopped talking.

PRESIDING EXAMINER: All right, Mr. Sparks, go ahead

[5283]

and finish your question.

MR. McALLISTER: I want the record to show, Mr. Examiner, at this point, that he had stopped and had paused and I voiced my objection and he gets redheaded over it.

MR. SPARKS: The record shows I obviously hadn't finished the question. All he was trying to do was interrupt.

MR. McALLISTER: I don't pursue your tactics.

PRESIDING EXAMINER: All right, go ahead.

Do you wish the question read up to this point?

MR. SPARKS: No, sir, I can restate the question.

BY MR. SPARKS:

Q. Mr. Bunn, as you understand the concept of the function of gathering as it is known and understood in the industry is the Wheeler Booster a gathering facility?

MR. McALLISTER: I object, Mr. Examiner.

PRESIDING EXAMINER: The objection is overruled.

MR. McALLISTER: May I have an understanding if this witness is going to speak for the industry, I don't want to have to voice an objection after every question. Now, that is all he is asking him is it known in the industry, is it known in the industry, without describing the function or giving any reason for it. He can speak for himself, he can speak for Phillips, but he is not shown here in any manner, shape or form to have an

understanding of the usage that it would have a uniform meaning. There is none of those showings here. I just want that general objection to the record and I don't care how far the witness goes, but I don't want to have to be running a race each time with the witness and counsel to try and determine when the question is completed and when the witness is going to begin to answer the question.

PRESIDING EXAMINER: The objection is overruled.

Answer the question.

THE WITNESS: Now I'd like to have the question read.

PRESIDING EXAMINER: Read the question.

(Question read by the reporter.)

THE WITNESS: Yes, it is. In accordance with my associations and contracts with many, many operators in the industry, partly in joint operations, partnership operations with them, in connection with the buying and selling of facilities and lines, and in considering such matters whether or not we buy or sell. I don't say that as a matter of concept of the industry from the standpoint of representing the industry and speaking for them as their official agent, nor that I have polled every single operator in the industry as to just what he thinks or does, but from many years of such associations as I have described I know what they normally consider and call such facilities as the Harper Booster.

BLEED THROUGH

BLURRED COPY

[5288]

* * *

THE WITNESS: In connection with the Judkins red line system including the Harper Booster which is a part of that system there are involved in the gathering facilities compressors, cooling towers, meters, water tanks, valves, regulators, pressure gauging instruments, temperature gauging instruments, houses and other buildings used in connection with it, all of which are regarded as a part of the gathering facilities.

BY MR. SPARKS:

Q. And necessary to carry on the operation of production and gathering? A. Yes.

Q. Leading out of the Goldsmith plant, to confine the question, there are also green lines through which residue gas is returned to some of the leases supplying gas which goes to the plant, is that correct? A. Supplying gas what?

Q. To some of the leases which supply gas that goes to the plant? A. Yes, they are delivering the green line, the green lines are for the purpose of delivering, and they do deliver, gas for lease operations and developments on some of the leases which

[5289]

supply gas to the plant.

Q. You have stated that those green lines or residue return lines are gathering lines within your concept of the function of gathering, did you not? A. Yes. They are encompassed in the entire operation of gathering.

Q. Are they ordinarily referred to as gathering lines? A. No, they are not. They are ordinarily referred to as residue lines or, taken together with the red lines, the red and green lines are very often referred to in the aggregate as field lines.

Q. Are they a part of the gathering facilities? A. They are a part of the gathering facilities in the performance of the entire operation of gathering.

Q. I wish you'd turn now to Exhibit 45-D. Do you have that? A. Yes, I have that.

MR. McALLISTER: Did you say "B" or "D"?

MR. SPARKS: "D".

MR. McALLISTER: The Dumas plant?

MR. SPARKS: That is right.

THE WITNESS: Yes, that is what I understood.

MR. McALLISTER: O. K.

BY MR. SPARKS:

Q. I'd like you also to turn to the aerial photograph

[5290]

of Dumas plant, which is Exhibit 113. A. Yes, I have 113.

Q. Looking first at Exhibit 45-D, the flow diagram of the Dumas plant, after the raw gas enters the plant, the plant yard, from the east it passes through three inlet scrubbers as shown on the diagram, does it not? A. That is right.

Q. Are those scrubbers pipe lines? A. No, they are not normally called pipe lines. They may be a pipe line installation but they are themselves not called pipe lines.

Q. Are they gathering facilities? A. They are. They

BLEED THROUGH

BLURRED COPY

may be—yes, they are gathering facilities in the total operation of gathering.

Q. And then the gas passes through some meters and goes through a gas treater where the hydrogen sulphide content of the gas is diminished, is that right? A. That is right.

Q. Is that gas treater a pipe line? A. No, it wouldn't be so classified ordinarily.

Q. Does it have pipe in it? A. Yes.

Q. Is it a gathering facility? A. It is a part of the gathering facilities, yes. It conditions the gas for at least a part of its disposal.

[5291]

Q. Then the gas together with some vapors passes through six plant absorbers as shown on the diagram? A. Yes, sir.

Q. Those absorbers are not pipe lines, are they? A. No, they are not regarded in common conversations as pipe lines.

Q. Are they gathering facilities? A. They are.

Q. There are other mechanical installations shown on the flow sheet, flash tanks, H. S. high stage, accumulator, primary vent tank, make tank, secondary vent tank, and then there is a reference to a fractionator. None of those facilities are pipe lines, are they? A. The vessels so labeled, no, are not pipe lines. They may be installed in pipe system but are of themselves not pipe lines.

Q. They are connected with a pipe line, are they not? A. Oh, yes.

Q. Are they part of the gathering facilities? A. They are.

Q. And the flow diagram also shows a boiler house, a generator building and a compressor building. While those buildings have piping in them, they are not pipe lines as such, are they? A. No, they are not referred to as pipe lines.

[5296]

* * *

THE WITNESS: Those lines we would commonly call water lines are not gas gathering lines, no. They don't gather gas directly, but they are a part of the gathering facilities.

BY MR. SPARKS:

Q. Are there also steam lines at the plant? A. Yes, sir, there are steam lines.

Q. Is what you have said with regard to water lines also true as to steam lines? A. Yes, sir. I might say that there are some lines that carry both steam and gas and there are some lines that carry both water and gas, but those we would call water lines would be lines that would carry water only and would not be in themselves gas gathering lines, but would be a part of the gathering facilities.

BY MR. McALLISTER:

[5297]

Q. Drinking water, for instance? A. Any kind of water they might carry, where their function is water carrying primarily.

BY MR. SPARKS:

BLEED THROUGH

BLURRED COPY

Q. The gathering operation requires a lot more than pipe lines to carry it on, does it not? A. Yes, sir.

Q. Now, Mr. Bunn, I wish you'd turn to Exhibit 45-A. A. I have it.

Q. There are shown on the flow sheet, Exhibit 45-A, both with regard to the Sherman and the Hansford plant numerous vessels and mechanical devices which are not pipe lines, isn't that correct? A. Yes, sir.

Q. But they are part of the gathering facilities? A. That is correct.

Q. That would include the camp houses of the employees who work at the plant, would it not? A. They are not shown on the diagram.

Q. They are not shown on the diagram— A. (Interrupting.) The houses, however, which are nearby and for the occupancy of the workmen who carry on the operation of gathering, those are—we classify those as a part of our gathering facilities.

[5298]

Q. And those houses are shown on the photograph, Exhibit 117-B, are they not? A. Yes. They may be seen in the photograph, Exhibit 117.

Q. 117 and 117-B also? A. Yes, 117 and 117-B.

Q. Those three photographs, Exhibit 117, 117-A and 117-B clearly discloses that there are numerous facilities and mechanical devices, vessels, at the Sherman plant and Hansford Plant in addition to piping and pipe lines, is there not? A. You say in addition to piping or pipe lines?

Q. Yes. A. Yes, there are many items that may be

readily discernible at the Sherman and Hansford plants from the photographs that would not be called pipe lines.

Q. And all of those facilities are necessary to condition the gas for disposals within your concept of gathering, is that right? A. All of the gas facilities, you say?

Q. Yes. A. In the plant?

Q. Yes. A. Yes, those facilities are for conditioning the gas for disposal or incorporated in the disposal itself

[5299]

in some cases.

Q. And many of the facilities which are necessary to condition the gas for disposal and to make the disposition do not appear on the diagram which is the flow sheet, Exhibit 45-A? A. Well, there are many that do not appear that could not be discerned readily from the photographs, yes.

Q. Very well, now, Mr. Bunn, will you turn to Exhibit 45-B. This is the diagram of the gas flow and some of the facilities of the Sneed plant, is it not? A. That is right.

Q. I believe that gas which Phillips sells to Panhandle Eastern, as you have testified, comes into the plant through a line at the east side of the plant which is marked "24-inch field gas to plant". A. That is right.

Q. It goes through some scrubbers— A. (Interrupting.) That line carries a part of the gas sold to Panhandle Eastern. I mean part of the gas that the line carries is sold to Panhandle Eastern.

Q. And it carries all of the gas that is sold to Panhandle Eastern? A. Yes.

BLEED THROUGH BLURRED COPY

MR. McALLISTER: What was that last question? It carries all the gas?

[5300]

PRESIDING EXAMINER: Read the question.

(Question read by the reporter.)

MR. SPARKS: I think it may not be clear on the record and I think it ought to be made clear.

BY MR. SPARKS:

Q. Part of the gas that comes into the plant is taken off after the gas goes through the gas treater and goes through a line marked "6-inch gas to re-absorber" and the gas that goes through that 6-inch line, none of it is sold to Panhandle Eastern, is that right? A. No, nor is that part of the raw gas removed in the gas treater sold to them.

Q. After the main body of the gas comes through the gas treater it moves through a 20-inch line to a point at the division fence between the Phillips and Panhandle Eastern property through a line which is marked "20-inch treated gas to Panhandle Eastern"? A. That is right.

Q. And the delivery of the gas is made at or very near that fence line to Panhandle Eastern? A. Yes. The gas is turned over to Panhandle Eastern at that property line.

* * *

[5311]

Q. Mr. Bunn, even though the line labeled "24-inch raw gas from Panhandle Eastern" and the absorbers and the lines carrying the plant fractionator overhead and vaporized

[5312]

liquids and the green line labeled "24-inch residue to Panhandle Eastern" were not gathering lines, are they transmission lines and transmission facilities?

* * *

[5313]

Q. Are the lines to which I referred in my previous question and the facilities to which I referred transmission lines and facilities? A. No, I don't think so. They are, as I have said earlier, I would say incidental to Panhandle Eastern's gathering of gas in that they serve in helping to condition the gas before it passes on. In any case they are merely processing lines for the treatment of the Panhandle Eastern Gas by Phillips Petroleum Company.

[5314]

Q. Insofar as they carry gas delivered by Phillips to Panhandle Eastern through the line marked "20-inch treated gas to Panhandle Eastern" are they also incidental to Phillips gathering? A. Yes.

MR. SPARKS: I am through with this exhibit if you wish to ask any questions at this time, Mr. McAllister, you can go right ahead.

MR. McALLISTER: No, I have a lot of other questions with respect to other exhibits, and I'd prefer to take up the cross-examination in sequence. Are you about through, though?

BY MR. SPARKS:

Q. Very well, will you turn now to Exhibit 45-E-1.

BLEED THROUGH BLURRED COPY

That exhibit reflects a diagram of the gas flow at the Eunice plant? A. Yes.

Q. It also shows a number of facilities, buildings, vessels, in addition to pipe lines, does it not? A. Yes. It indicates on its face a number of items such as you described.

Q. Are those other facilities shown on the flow sheet a part of the gathering facilities utilized by Phillips Petroleum Company in the collection, conditioning and disposal of the gas at that plant? A. Yes.

Q. And as such are they gathering facilities? A. They are part of the gathering facilities at this plant and in this system.

[5315]

Q. Now, I believe— A. (Interrupting) I should qualify that with reference to the exhibit as a whole to the extent to say that there is one line on here which is not a part of the gathering facilities in that it is for the purchase of gas from another concern for fuel.

Q. Is that the line which is labeled "treated gas from Witco"? A. Yes.

Q. Are there other facilities and mechanical devices utilized in connection with the operations at the Eunice plant which are not shown on the flow diagram which is Exhibit 45-E-1, but which are a part of the facilities used in connection with the collection, conditioning and disposition of gas at that plant? A. Yes. They are a part of the system which effects the complete operation of gathering gas.

Q. Are the vent lines and the flares a part of such facilities? A. Yes. I believe I indicated so before.

MR. McALLISTER: Are you looking at a photograph now?

THE WITNESS: I'm looking at the Exhibit 45-E-1, which does not show all the flare lines but does indicate a line to the flare in one instance. However, the question had to do with other equipment, not all of which is shown.

[5316]

BY MR. SPARKS:

Q. Do those facilities include camp houses utilized by employees that operate and maintain the gathering lines and other gathering facilities? A. Yes, sir.

Q. Very well. Turn to Exhibit 45-F-1. That exhibit is a flow sheet of the flow of gas at the Fullerton plant, is it not? A. That is right.

Q. And does the flow sheet show on its face vessels, buildings, compressors, furnaces and other mechanical devices which are not pipe lines but which are necessary facilities utilized in conjunction with the gathering of gas? A. Yes. The devices or equipment, some of which you have enumerated, are not shown as such on here, but are indicated, as for instance the block for compressors and such. A. And in addition to those which are indicated on the diagram are there others in the plant which although not pipe lines are necessary facilities utilized in the collection, conditioning and disposal of the gas?

MR. McALLISTER: I object, Mr. Examiner. There are other things in the plant, why, I suppose, there is nuts and bolts and screws and baling wire. I don't know what kind of a plant it is, but if there is something that is impor-

BLEED THROUGH

BLURRED COPY

tant to this let's have it, let's name it, instead of just trying to lump all of the other

[5317]

facilities that may be in there. I suppose there is nails and maybe they have some rock and some earth piled in some corner to hold down a pipe and I suppose that is what he is referring to.

PRESIDING EXAMINER: I suppose that will be developed.

MR. McALLISTER: I mean he just said there are other things. Read the question. What in the world are we to understand by the question?

PRESIDING EXAMINER: The objection is overruled.

Answer the question.

THE WITNESS: There are a number of other items of equipment that are used in performing the function of gathering which are not shown in the diagram. There are also plant houses for occupancy of employees, which are not shown on the diagram, but are adjacent to the plant which would be regarded also as a part of the combined gathering facilities.

BY MR. SPARKS:

Q. Are there not also pipes in the plant which are not gas gathering lines?

MR. McALLISTER: I object, Mr. Examiner. It is another one of those questions that doesn't mean a single thing.

PRESIDING EXAMINER: The objection is overruled.

THE WITNESS: Yes, there are a number of lines that

would not be called gas gathering lines ordinarily. They are lines that carry steam and so forth that would not be called gas gathering

[5318]

lines ordinarily at all. They are, however, a part of the gathering facilities, in that they perform as an adjunct to the combined operation of gathering.

Q. Now turn to Exhibit 45-G-1. I believe I want you to direct your attention first to a raw gas line coming from El Paso Natural Gas Company as shown on the diagram through two meters labeled "24-inch 600-pound wet gas from El Paso" and a green line going to the right on the sketch and then turning at right angles through a block labeled "two meters" and labeled "24-inch 600-pound residue gas to El Paso". A. Yes, I see those lines.

Q. I believe you have stated in your testimony that those lines were incidental to Phillips gathering, and I believe at another point in your testimony you stated that Phillips gathering had been completed at the time of delivery of the gas to El Paso through the line which is labeled "24-inch 50-pound wet gas to El Paso"? A. Yes, I recall there is some confusion in what I had said on the two occasions in reading the record. In one instance, I believe in connection with the questions asked, when I may have indicated that is the end of gathering where the red line labeled "50-pound wet gas line to El Paso" reaches the point of delivery, was the end of gathering. I made a erroneous statement and not at all consistent with the statement I had made otherwise or that I think the facts bear out as to the operations, because

BLEED THROUGH

BLURRED COPY

[5319]

those lines as I see them, the two you have referred to, the 600-pound wet gas line from El Paso, a red line, and the 600-pound residue gas to El Paso, a green line on 45-G-1, are incident to the conditioning of the gas which El Paso buys from Phillips and eventually takes down its pipe lines. The gasoline is not extracted from the gas originally delivered to El Paso through the red line labeled "50-pound wet gas line to El Paso" and is therefore not conditioned for the disposal to El Paso. The two lines, 24-inch 600-pound residue gas to El Paso and the 24-inch line labeled "600-pound wet gas from El Paso" are both incident to the gathering of the gas by Phillips in that they are necessary to convey the gas for conditioning from and back to El Paso.

Q. Are those two 600-pound lines, the one marked wet gas and the other marked residue gas, and the 600-pound absorber transportation lines or transportation facilities?

MR. McALLISTER: I object, Mr. Examiner. It calls for a conclusion of the witness and the witness has not defined the term that counsel seeks him to use and it has not been defined by counsel in the question.

PRESIDING EXAMINER: The objection is overruled.

MR. McALLISTER: Note an exception?

PRESIDING EXAMINER: Note an exception.

THE WITNESS: Certainly I wouldn't call them transmission lines in that they serve the purpose only of moving the gas in a

[5320]

loop through Phillips facility and serve no direct purpose

in advancing it through El Paso's facilities, through El Paso's pipe line facilities.

BY MR. SPARKS:

Q. There is shown on this sketch, 45-G-1. A. 45 which?

Q. G-1, for the Goldsmith plant, in addition to the pipe, piping or pipe line, whichever you want to call it, a number of vessels or diagrammatic suggestions of facilities such as the dehydrator and plant gas treater and compressor building and compressors, inlet scrubbers, high stage injection compressors. Are all of those facilities facilities used in conjunction with the collection, conditioning and disposition of the gas by Phillips? A. Yes, all those that you named are. There are some facilities indicated on the diagram which are not a part of those facilities, such as Sid Richardson Carbon Black Company. That is not meant to be a plant or if it is it isn't a part of Phillips' facilities.

Q. That is true also of the block that is labeled "El Paso Natural Gas Company"? A. That is right.

Q. Are there other facilities and equipment in this plant which is not shown on the flow sheet or exhibit? A. Yes, there is considerable equipment in the plant that is not indicated or labeled or shown, which is used in connection

[5321]

with the collecting, conditioning and disposing of the gas which comes to the plant.

Q. And are there other lines, pipe lines or piping? A. Yes, there are many other pipes and lines, some short sections of pipe line through the plant, some carrying water, some carrying steam and other substances, all of which are

BLEED THROUGH

BLURRED COPY

included as a part of the facilities for the over-all functioning of gathering the gas.

Q. Very well. Now turn to Exhibit 45-H-1. That exhibit indicates diagrammatically the flow of gas in the Crane plant, does it not? A. Yes, that is right.

Q. The exhibit also indicates diagrammatically facilities such as cooling towers, engine room, vessels, absorbers, various tanks, gas treater, and numerous meters, which are not pipe lines? A. No, none of those items as you mentioned them would be called pipes or pipe lines.

Q. Are all of those facilities shown on the diagram, such as these facilities shown on the diagram, utilized in connection with and a necessary part of the collection of the gas, conditioning of the gas and disposal? A. Yes, they are a part of the over-all gathering facilities.

Q. Does that include the green residue lines or to make that more specific does that include the green residue line

[5322]

which is markd "24-inch" and also marked "residue to El Paso"? A. Yes, that is a part of such facilities out to the point where Phillips turns the gas over to El Paso.

Q. Does it include the green line which is marked "flare"? A. Yes.

Q. Are there other facilities in that plant which are not shown on the diagram? A. There are a great many facilities not shown on the diagram used in the performance of collecting, conditioning, and disposing of the gas. There are also houses adjacent to the plant shown on the diagram for the occupancy of the employees which take care of and

operate the gathering facilities that have been mentioned and they are considered a part of over-all gathering facilities.

Q. I believe I failed to ask you about Exhibit 45-C. Will you turn to that one, please. That diagram shows certain facilities at the Gray plant, and my questions to you will be with reference to the area that is marked "Gray plant" and enclosed by— A. (Interrupting) And what?

Q. And enclosed by a fence, which is a dash-X line on the exhibit. The exhibit shows on its face intake compressor in a block and absorbers in a block. Those are facilities which are used in connection with the collection, conditioning and disposal of the gas at that plant which are not pipe lines?

[5323]

A. Yes. Those labels indicate equipment which are not themselves pipe lines. There is other equipment in the plant also than that indicated which is not, may not be called, pipe lines and some which is called piping or pipe lines in some cases, which is a part of the facilities in the over-all function of gathering in the Gray plant system.

Q. Do all the facilities in that Gray plant which belong to Phillips constitute a part of the facilities by which Phillips collects, conditions and disposes of the gas at that plant? A. They are.

* * *

[5403]

BY MR. McALLISTER:

* * *

BLEED THROUGH

BLURRED COPY

Q. Then I asked you another question, and I said does gathering, according to your concept, then end

[5404]

at the exact same point where the gas is turned over to Panhandle? A. The gathering itself which, in the case of this disposal, involves the sale as an incident to it, to that gathering and to that disposal, in my opinion, because the sale question is a legal concept in my opinion, does not end except on completion of the sale, which in my concept, would include not only the physical turning over of the gas but would include the billing for it and the collection of the money.

Q. Then does Phillips continue to own the gas all the way through the Panhandle line until such time in the future Phillips bills for the gas and gets payment for it? A. I don't know. I wouldn't think so, but I don't know.

Q. You don't know that? A. If they didn't pay us for it at sometime or other, I'd like to know the answer to that one.

Q. Even though it went into Milwaukee and somebody had already burned the gas up there, why, it is still Phillips gas until they get paid for it, is that right? A. There wouldn't be any gas if it is already burned up, I don't believe.

* * *

[5420]

Q. Yes, that is the answer I wanted. You talked about the houses around there. If they were to burn down tomor-

row or is it going to effect the functioning of the gasoline plant? A. It might.

Q. How? A. Well, the plant might be exposed and shut down in the fire that burned the houses.

Q. I said yesterday. The fire is out now. A. Well, the plant might still be down, too.

Q. Just getting right down to brass tacks, it is a facility that may be provided in the way of a camp or housing, but it in no way functions as a part of the processing plant, it is merely a place for some people to live? A. That is what it's for. It is a place to live and there are several alternatives in that connection of housing people

[5421]

just the same as there are several alternatives in collecting and processing.

Q. Even if they slept in a tent the plant can go on without the houses, is that right? A. If the houses are there or the tent is there, it is Phillips Petroleum Company's property and they have had to provide it under the circumstances, then it is an adjunct to the whole operation.

Q. All right, if you call it adjunct then I haven't any more questions about it. A. It is a facility and if you want to be more precise than I sometimes am or no how to be, it is an incidental one at least.

Q. As long as we make it plain what its function is we don't have to worry about it? A. That is what I thought.

Q. I suppose the plant fence is in the same category? A. Yes, I'd so classify it.

BLEED THROUGH

BLURRED COPY

Q. And I suppose you are still sticking to the idea that the vent pipe up in the air 40 feet or so is a gathering line? A. If it is connected, if it is not a piece of pipe as you say.

Q. I mean for the purposes of this question it is connected and when you light it there is a flame out of the top of it? A. It is now connected?

[5422]

Q. Yes. A. It is one of the facilities, yes, sir. It is a facility for disposal and a very important one.

Q. And it is a gathering line in that respect? A. It is a part of the whole gathering system as I said before.

Q. It is a gathering line, I don't want to get away from that, because you have said it about 40 times and if you are going to change it— A. (Interrupting) No, sir, I have said that and I still say it is a gatheing line in the performance of the entire function of gathering.

Q. What is the real distinction between facilities, gathering facilities, and facilities incidental to gathering? A. Well, the distinction that I make is that those facilities that are involved directly in the physical operations of the collection, the conditioning or qualifying of the gas and the disposal are gathering facilities, and other things which do not enter so directly in the first turn-over of the gas in connection with the disposal, but still perform part of the total gathering operation, would be incidental or would be supplemental in any case to the direct facilities, such as the office that I spoke about or the dwelling houses, they would be, I think more properly said to be incidental gathering facilities.

Q. If you went down to that office and sat down in one of

[5423]

the chairs in the office, then you become incidental to gathering, is that it? A. No, I don't think I would be a facility.

Q. Well, the chair is? A. Well, if it is our property and needed there, yes, it would be an incidental facility. The pencils and the paper we write on, those would be.

Q. And if you went down there and you got an automobile to ride you around and around the plant to look at it, why, the automobile is incidental to gathering? A. We certainly regard our automotive equipment that is located at these plants as incidental facilities to the operation.

Q. I didn't say that, I say incidental to gathering? A. I say to our operations which is gathering in most of the instances we have been talking about in these plants.

Q. Those automobiles are incidental to gathering or do we have to take up this word operation and fuss with that? A. I think that is a better term to use, because while they enter in some respects directly into the handling of the gas, such as the testing equipment, which is automotive equipment and the meter equipment and so forth, but even at that I think they would be termed as incidental facilities. We set them up in our plant there as a part of the cost of the thing.

* * *

[5445]

Q. I said where in relation to the delivery points from

BLEED THROUGH

BLURRED COPY

those nine plants does gathering end, according to your concept.

[5446]

That is all. It is a very specific question, and it is a very definite one, and I want it not in general terms but I want it in specific terms in relation to each of the nine if you can give it to me. You have said all afternoon you couldn't be specific? A. And I'm telling you now that I can't tell you because with respect to gathering, which you have asked, as regards those points, gathering in our concept involves the sale, and I don't know where the sale is. That is a legal thing that I don't know.

Q. That is the first time you have said that? A. No, I have said that all afternoon.

Q. No you haven't. That is a new one, it is the first time you said it. A. I have said sale is an incident to gathering.

Q. You have stalled all around sales, that is the first time you said that. So now the sale is a part of gathering? A. I have said quite a number of times that the sale is an incident to gathering.

Q. You have said it is something that follows it, and now you are saying it is a part of gathering? A. I didn't say it followed it, I said I didn't know what constituted it. That is the thing I wanted a legal opinion about.

Q. If you don't know what constitutes a sale, how do you

[5447]

know it is a part of gathering? A. I'm saying that has

been our concept of it, that when we build a facility we try to sell gas and as you suggested in one of the presumptions a while ago, usually one of the things we may do at the outset is to try and make a contract with someone who wants the gas and then we provide the facility to make the disposal.

* * *

[5485]

MR. McALLISTER: At this time and in aid of Mr. Sparks' argument, Mr. Examiner, I offer a stipulation which has been entered into between the Staff counsel and counsel for Phillips Petroleum Company and ask that the stipulation be copied into the record.

[5486]

PRESIDING EXAMINER: Is there any objection?

(No response.)

PRESIDING EXAMINER: Have copies of the stipulation be made available to the other counsel.

MR. McALLISTER: There have been no other counsel here except that it was made available to Mr. Lee and Mr. Joffee, Mr. Torkelson of the Wisconsin Commission and they stated to me that they had no objection.

You will recall at the time I discussed the matter of probable ability to enter into a stipulation that we took a recess for a half a day, and I stated at or about that time that we had not taken in this stipulation in any way to deal with the matters which the City of Kansas City, Missouri had undertaken to prove through witnesses with respect to the movement of gas sold and delivered by

BLEED THROUGH

BLURRED COPY

Phillips Petroleum Company to Cities Service Gas Company. In the first place Mr. Joffee was not here at that time to aid in the formulation of the stipulation, and I have since called his attention to the statement made and he said it was satisfactory to him.

PRESIDING EXAMINER: Mr. Tulane, of course, is here. I wonder if he had seen a copy of it.

MR. TULANE: Had Mr. Torkelson looked it over?

[5487]

MR. McALLISTER: He did. There may be some changes in here, but it was merely a word changing.

MR. TULANE: Well, I am satisfied, then, that it is substantially correct.

* * *

PRESIDING EXAMINER: The stipulation referred to by Staff Counsel has been approved by the Examiner and will be transcribed in the transcript at this point and, of course, filed with the Secretary of the Commission.

[NOTE: This stipulation appears in the Joint Appendix as Appendix B following the dissenting opinion of Commissioner Buchanan which may be found on Record pages 10,955-10,959. It is not printed here to avoid duplication.]

[5519]

PRESIDING EXAMINER: Exhibits 3 to 7, inclusive, are obviously quite relevant to a rate proceeding, but I can see no relevance of these exhibits to the question of jurisdiction.

The objection is, therefore, sustained to Exhibits 3, 4, 5, 6 and 7. They will be marked excluded, offer of proof, exception and filed with the commission.

• • •

[5528]

B. P. STOCKWELL

was called as a witness, and after having been first duly sworn, was examined and testified as follows:

Direct Examination by Mr. McAllister

Q. Mr. Stockwell, what is your name, please? A. B. P. Stockwell.

Q. Where do you reside? A. Kansas City at the present time.

Q. Kansas City, Kansas? A. Kansas City, Missouri.

Q. I believe you are employed by the Federal Power Commission?

[5529]

A. I am.

Q. In what capacity? A. Natural gas engineer.

• • •

[5534]

Q. Mr. Stockwell, what do you understand by the term gathering as it is used in the natural gas industry? A. Gathering is a descriptive term used to describe operations by which gas is produced from a number of wells and assembled at a common point through connecting pipe

BLEED THROUGH

BLURRED COPY

[5535]

lines generally referred to as field lines.

Q. In that definition, as you have given it, what do you mean by the phrase "common point"?

• • •

[5536]

Q. Referring to the last question I gave you, Mr. Stockwell, will you give your answer beginning at the first? A. I believe you asked me what I referred to as common point?

Q. That is right. A. I consider it that point at which gas from a group of wells is assembled into a common line which line is designed and built to carry or convey that volume of gas either to a processing plant or to a pipe line, transmission line.

Q. You meant when you referred to pipe line there, you are referring to a transmission line as distinguished from another field line? A. I am referring to a transmission line.

Q. When does gathering end? A. Gathering of gas cannot extend beyond the point

[5537]

where common pipe line enters the processing plant or connects with a transmission line. Gathering may, however, under certain circumstances end at a point short of the processing plant. It is impossible to state in general terms where gathering will end in all circumstances. I have undertaken only to fix an ultimate limit of gathering in my statement of where gathering ends.

BY MR. SPARKS:

Q. Are you reading your answers, Mr. Stockwell?

MR. McALLISTER: Yes, he is.

MR. SPARKS: I have no objection. It just appeared that he was and I just thought—

MR. McALLISTER (interrupting): I have asked him to make them exact.

BY MR. McALLISTER:

Q. Mr. Stockwell, what do you understand by the term processing plant? A. The term processing point generally describes plants wherein heavy hydrocarbons are extracted from natural gas or where gas is treated for the removal of sulphur or for the purpose of dehydration. Any one or all three of these processes may be consummated at one point or in one plant. This process may also be performed at other places than in the field, such as places along a transmission line.

• • •

[5538]

Q. Do you mean by your last statement, Mr. Stockwell, that processing is entirely unrelated to gathering? A. It most certainly is. It is an individual process in itself and is not related to any other, necessarily related to any other, gas operation.

Q. From your experience in the natural gas industry can you give us some examples to show that processing is a distinct operation separate from gathering? A. Yes, I believe I can. When I was operating in Oklahoma during the years 1926 to '31 I operated a gas production and trans-

BLEED THROUGH BLURRED COPY

mission system near the town of Bristow, Oklahoma. The gas was produced, gathered and brought to a common point about seven miles north of the City of Bristow, where it entered the transmission system and was transported to a point about a half mile north of Bristow where it was then processed in a gasoline plant and from that point transported to for distribution and sale. In that case the processing plant was not close

[5539]

to the gathering system and not connected with it, only through a pipe line, a transmission line.

Q. When you referred to processing there, what was the purpose of the processing in that plant? A. I didn't understand you.

Q. What was the processing in that plant? A. We were extracting the gasoline from the gas by the absorption method.

Q. Can you give us another example? A. Well on Panhandle Eastern Pipe Line Company system they assemble gas purchased and produced at Hugoton compressor station where gas is brought to transmission line pressure by compressors, and transmitted through a 26-inch line a distance of approximately 27 and a half miles to the Liberal gasoline plant near Liberal, Kansas, where this gas is processed to extract heavy hydrocarbons and so forth.

Q. Can you give us still another example? A. There is another example of the same kind on Panhandle where they assemble certain gas they have produced and purchased in the Hugoton field at Satanda station, where this

gas is compressed to transmission line pressure and then is likewise transported a distance of approximately 26 miles to Liberal gasoline plant, where it is processed to remove heavy hydrocarbon. Both these Panhandle Eastern operations lie wholly within the Hugoton field.

[5540]

Q. What is another example? A. Several years ago I was working on the United Fuel Gas system in West Virginia, they produced and gathered gas at various points, from which points it was transmitted through a transmission line to Cobb Gasoline plant where it was then processed, and—

Q. (Interrupting) Was that—go ahead. A. And another case in West Virginia concerns the gasoline plant at Hastings owned by the Hope Natural Gas Company. Most of the gas processed at this plant came into the plant through Hope's transmission lines and those transmission lines gathered gas for a distance of some 50 to 75 miles from the plant and maybe farther.

Q. When you say they gather gas, do you mean they carry gas— A. (Interrupting) I mean they transported gas from various points, where it was gathered, to this plant and the plant was on the transmission system in that case.

Q. In other words— A. (Interrupting) There were, however, I think, some local gas around that plant that may have come in on gathering lines from properties around the plant there proper, but large quantities of the gas that was processed in that plant were delivered to that plant through the Hope's transmission system.

BLEED THROUGH

BLURRED COPY

Q. What I want to get at and have the record clear on is

[5541]

that the gas was assembled in common point and gathering completed, as I understood your answer before transmission and that transmission carried over a distance of something like 75 to a hundred miles, is that right? A. 50 to a hundred miles, somewhere in that neighborhood, yes, sir.

Q. But the point I'm asking you is this, had gathering been completed before it was transmitted through that transmission line? A. Gathering had been completed at various points over the system before the gas entered this transmission system that carried the gas to the gasoline plant.

Q. I see. Do you have another example of a like situation on Hope's system? A. They had another situation of that kind in the case of their gasoline plant located at Schultz, which is over near Parkersburg, West Virginia. There practically all of the gas was processed at that plant was delivered to the plant through Hope's main transmission lines.

Q. What was the distance after gathering was completed before the gas entered the processing plant through the transmission lines? A. In that case some 40 to 50 miles, I would judge.

Q. Do you have any other examples? A. On the United Gas Pipe Line Company properties where I now have some men working, they operate a gasoline plant at

[5542]

Latex, Texas, where they process large quantities of gas. Most of this gas has been gathered and delivered through transmission system to the Latex plant.

Q. When you say gathered there you mean gathering has been completed before it enters the transmission? A. Yes, sir, that is what I mean. The transportation to this plant is of varying distances up to, I'd say, about 50 miles. Another instance of this nature existed several years ago when I worked on the Ohio Fuel Gas Company property, where they operated a gasoline plant at Crawford No. 1 station. That is located about 40 miles south of Columbus, Ohio. This processing plant—I'll say it this way, the gas that this processing plant processed was practically all brought to this plant through their main transmission lines.

Q. Where you have used processing in these various examples have you been referring to gasoline plants for the extraction of the heavier hydrocarbons? A. That is right.

Q. I believe you did state that at all of these plants or some of them, in any event, except the last one on the Ohio Fuel Gas Company's system, there was some gas produced locally which by various lines may have been brought into the processing plant, those various lines being field lines, is that right? A.There was no gas produced locally on the plant that I operated myself.

[5543]

Q. I see.

MR. SPARKS: I believe he so stated with regard to

BLEED THROUGH BLURRED COPY

some of the others, but I could be mistaken.

BY MR. McALLISTER:

Q. Pass over that one, then, and the Ohio Fuel and state which of them may have or do process some gas locally as well as the gas that is brought in through transmission lines? A. Those on the United Fuel and the Hope, I feel quite sure, had some, handled some, local gas, yes.

Q. Is there any of that character of gas on the two Panhandle examples that you gave us where the gas would be brought into the Liberal gasoline plant? A. Liberal plant handles the gas that comes in from the two main compressor stations I mentioned. It also handles some gas that comes in from a field, a section of the field, there southwest of the Town of Liberal that comes in direct from the field.

Q. Do you mean field lines? A. Yes, I think at a lower pressure, I'm sure at a lower pressure than the pressure at which these other lines deliver.

Q. Are the processing plants in the examples which you have been giving to us a part of such local gathering facilities? A. They are certainly not a part of the gathering facilities as I see it. Furthermore in these cases I have mentioned the major portion of the gas processed in these plants come through

[5544]

the transmission system before being processed.

Q. Have you examined Exhibits Nos. 45-A, 45-B, 45-C, 45-D, 45-E-1, 45-F-1, 45-G-1, and 45-H-1 in this docket? A. Those are flow diagram exhibits?

Q. That is right. A. I did examine them, yes, sir.

Q. From a consideration of those exhibits, being flow diagrams of the Sherman, Hansford, Sneed, Dumas, Gray, Eunice, Fullerton, Goldsmith and Crane plants operated by Phillips Petroleum Company, would you say that there is anything extraordinary or unusual about those plants as compared with the ordinary run of plants with which you are familiar? A. There was nothing I could see from those diagrams, no, sir.

Q. From your study and examination of those exhibits does it appear the operation of those plants constitutes a part of gathering?

* * *

THE WITNESS: No, they are definitely processing plants.

[5545]

I can't conceive of anyway they could be considered a part of gathering. In fact, I have been in the business for 30 years and I never heard of classifying processing plants with gathering systems until Saturday here when I heard it in this court room.

BY MR. McALLISTER:

Q. It has been testified in this case that gathering of natural gas is not completed until the gas gathered has been disposed of, for example, sold and delivered to another company, flared or consumed in some device by the gatherer or the like. Do you agree with that? A. I certainly do not. Gathering, processing and transmission—

Q. (Interrupting) And what, transportation? A. Trans-

BLEED THROUGH

BLURRED COPY

portation, through the transmission line, maybe completed before the gas is disposed of.

Q. Then you would not agree that the flaring of gas out of a gasoline plant is a part of gathering? A. No. As I said before it is a part of the operation of that gasoline plant if they do that, and I said that gasoline or the processing plant was no part of gathering.

* * *

[5546]

HARRY P. STEVENS

was called as a witness, and being first duly sworn, was examined and testified as follows:

[5547]

Direct Examination by Mr. McAllister

Q. What is your full name, Mr. Stevens. A. My name is Harry F. Stevens.

Q. Where do you reside? A. Washington, D. C.

Q. I believe you are employed by the Federal Power Commission? A. Yes, sir.

Q. In what capacity? A. Natural Gas Engineer.

* * *

[5550]

Q. Is a natural gas plant and a natural gas processing plant the same thing, Mr. Stevens? A. Not necessarily. A natural gasoline plant for the extraction of heavier hydrocarbons may also have installations for sulphur removal

and dehydration. In that case they would be substantially the same. However, different plants may be maintained for each purpose, namely, to extract heavy hydrocarbon, to remove sulphur or for dehydration purposes.

Q. Is a natural gasoline plant or a natural gas processing plant in any way a part of the gathering of natural gas? A. No.

MR. SPARKS: I object again to this witness' testimony in expressing an opinion—I assume it is conceded that is what he is expressing—with regard to what constitutes a gathering of natural gas for the reason that I don't believe he has been shown to be qualified to have an opinion as to the use and meaning of that term as it is used in the industry.

* * *

[5552]

BY MR. SPARKS:

Q. Mr. Stevens, are you also reading your answers? A. Yes, sir.

MR. McALLISTER: I'll give you a copy of it as soon as we have finished, Mr. Sparks, if it will be of any assistance to you.

MR. SPARKS: I'll get my copy from the official reporter.

* * *

[5560]

PRESIDING EXAMINER: Strike out "and an examination

BLEED THROUGH

BLURRED COPY

[5561]

and study of the exhibits", from there on.

BY MR. McALLISTER:

Q. Do Exhibits Nos. 12-A, 13-A and 45-A support you in the conclusions which you have expressed, Mr. Stevens? A. Yes, I think they do.

Q. Would you say that gathering is an adjunct to processing or transmission? A. Yes, I would since the only reason for gathering natural gas is to assemble the gas for processing and transportation.

Q. Where the gas is assembled merely for processing through a gasoline plant, what would you say there? A. When that is the case, the gathering of natural gas is to assemble such gas for the recovery of natural gasoline as a prime objective and other recoverable hydrocarbons, and if you say, for instance, that the substantial part of the residue gas is flared and doesn't go to a pipe line, the gathering may be said to be an adjunct to manufacture, since the gathering is for the assembly of a raw material which by manufacture or process is converted into natural gasoline, propane, butane or other marketable products. In such a case, the gathering system is but a plant facility.

Q. It has been testified in this case that the gathering of natural gas does not end until the gas reaches

[5562]

the point of disposal, that is, where the so-called gatherer sells and delivers the gas to another person, flares or vents the gas or consumes the gas under boilers or injects gas returned to leases or the so-called gatherer into gas or oil-

producing formations at the bottom of an injection well, where such disposal occurs after processing in a gasoline plant. Do you agree with such a concept? A. I cannot possibly agree with such an idea. Gathering ends when natural gas has been assembled at some common point of flow, point of common flow, in a pipe line designed to carry that gas to a processing plant or to some connecting transmission line. Gathering cannot possibly extend beyond the processing plant. It may end short of the processing plant. That determination depends upon a study and consideration of the facts in such instances.

Q. Is the character of the natural gas altered in a gasoline processing plant? A. The residue from a gasoline plant or processing plant is essentially the same. The proportion of the constituent elements is altered. If the gas passes through a desulphurizer, the objectionable sulphur is removed. Chemical elements making up the heavier carbons are reduced as the natural gas passes through the absorbers in the gasoline plant. Moisture and water vapors are removed by dehydration. However, natural gas processed through such plants, which

[5563]

gas is destined for pipe line transportation to domestic markets and industrial use has a btu content on the order of 975 to 1,000 Btu's per cubic foot. The constituent elements remain. The proportion of some of the elements to the total has, of course, been altered.

Q. But it still remains natural gas, is that right? A. Yes, sir.

* * *

BLEED THROUGH

BLURRED COPY

[5567]

MELWOOD W. VAN SCOYOC

was called as a witness, and after being first duly sworn, was examined and testified as follows:

Direct Examination by Mr. McAllister

Q. What is your full name, Mr. Van Scoyoc? A. Melwood W. Van Scoyoc.

Q. Where do you reside? A. Alexandria, Virginia.

Q. I believe you are employed by the Federal Power Commission? A. I am.

* * *

[5570]

About six months after going with the Federal Power Commission I was placed in charge of that work as Chief of the Division of Original Costs, and my activities in that work continued until I went on military leave with the army in July 1942. I returned to service with the Commission in September of 1945 as Assistant Chief of the Bureau of Accounts, Finance and Rates.

In that position I have supervisory responsibility covering the four divisions of the bureau. The Division of Accounts, the Division of Rates, the Division of Finance and Statistics and the Division of Gas Certificate. I have been actively associated with the activities of those particular divisions and their duties and responsibilities since that time.

Q. Are you familiar with the rules and regulations of the Federal Power Commission insofar as they relate to

[5571]

natural gas companies — A. (Interrupting): Yes, sir.

Q. (Interrupting): —as such term is defined in the Natural Gas Act? A. Yes, I am.

Q. How many of the companies which report to the Federal Power Commission as natural gas companies are engaged in the production of natural gas? A. There are about sixty such companies.

Q. How many of the companies are classified as A and B companies? A. Fifty-four.

* * *

[5583]

Q. I think you just stated, Mr. Van Scoyoc, in answer to a question as to how many companies report to the Federal Power Commission—put it this way, how many of the companies which report to the Federal Power Commission are natural gas companies and are engaged in the production of natural gas and you answered, as I recall it, 60 such companies. Now, how many of those companies fall in the class of reporting companies classified under the uniform system of accounts as Class A and class B companies and what is that classification?

MR. SPARKS: May I have a continuing objection to this line of testimony.

PRESIDING EXAMINER: Yes, you have a continuing objection.

THE WITNESS: There are 54.

MR. SPARKS: I didn't hear the answer.

THE WITNESS: There are 54 such companies and that

BLEED THROUGH

BLURRED COPY

classification covers companies whose gross operating revenues exceed $250,000 per annum.

BY MR. McALLISTER:

Q. How many producing gas wells are owned by such companies, the 54 companies? A. There are 30,162 producing gas wells.

Q. And how many oil wells?

[5584]

A. 622.

Q. In addition to the 60 companies which you mentioned, are there other companies reporting to the Federal Power Commission as natural gas companies which do not produce gas but do carry on field operations and in some cases process natural gas? A. Yes. There are eight such companies who gather and process gas but do not have producing wells of their own.

Q. As to those 54 natural gas companies in the classification that you have designated at "A" and "B" companies, that you have mentioned as owning producing wells, do those companies also gather and process natural gas? A. Yes. Most of those companies engage in those operations.

Q. Upon what do you base your statement that those companies are engaged in procesing operations? A. I base my statement on the reports which are made to the Commission by such companies and I included in the word process the extraction of liquid hydrocarbons and the removal of sulphur, water and other impurities.

Q. Are a substantial number of those companies which

you mentioned performing such activities in the midcontinent and southwest section or sections of the United States? A. Yes, they are.

• • •

[5585]

Q. What proportion of the 54 companies operating in the southwest and midcontinent area are engaged in the activities of producing, gathering and processing of natural gas within the states of Arkansas, Kansas, Mississippi, Louisiana, New Mexico, Oklahoma and Texas? A. About one third of the 54 companies, 17 of them to be exact.

Q. Are any of the other "8" companies, I mean that is the difference between the 60 who are natural gas companies and the 54 which are classified "A" and "B" companies, are any of the other eight companies engaged in gathering and processing activities and reporting to the Federal Power Commission as natural gas companies conducting their operations in the seven states you have mentioned? A. Yes, there are six of those companies in that area.

Q. Have you been in attendance in this hearing room during the course of the proceedings in this docket? A. Yes, I have, except for a period of three days.

Q. Were you present when the witnesses Giles, Thompson, Murray, Cavett, Davis, Baumel, Spurrier, Capshaw and Jones testified in this proceeding? A. Yes, I was present.

Q. Have you examined the various exhibits placed in evidence in this proceeding by counsel for interveners and respondent which related to duties, functions, rules, regulations

BLEED THROUGH

BLURRED COPY

[5586]

and orders of the Texas Railroad Commission, the Oklahoma Corporation Commission and the New Mexico Oil Conservation Commission? A. Yes, I have.

Q. With respect to the production and gathering activities of the natural gas companies which you mentioned as reporting to the Federal Power Commission, has the Federal Power Commission ever issued any rules, regulations or orders which relate to the duties or functions of the three state agencies described by the above enumerated witnesses?

* * *

Q. (Interrupting) And or as indicated by the exhibits to which I have referred?

* * *

[5587]

A. No, the Commission has never issued any such rules, regulations or orders which relate to the production and gathering activities of natural gas companies reporting to the Commission.

BY MR. McALLISTER:

Q. Or any of them? A. Or any of them.

Q. And you omitted the word processing in your answer. Did you intend to include that? The question specifically asked you regarding processing. A. Well to answer your question on processing, there may have been a case where a natural gas company applied for a certificate to build a new pipe line and they may have included the processing plant as a facility and requested a certificate

thereon. It is possible that the Commission in entering an order granting the certificate may have granted it in the terms of the facilities applied for rather than specifying certain lines or facilities.

* * *

[5611]

Q. The other day during the questioning of Mr. R. R. Spurrier, a member of the Oil Conservation Commission of the State of New Mexico, the question arose as to whether the Southern Union Gas Company was a natural gas company reporting to the Federal Power Commission. Do you know of your own

[5612]

knowledge whether that company files any reports or otherwise reports to the Federal Power Commission as a natural gas company? A. It does so report to the Federal Power Commission.

Q. Do its reports to the Commission show it's engaged in the production, gathering and processing of natural gas in the states of Texas and New Mexico? A. The reports so show.

Q. Has the Federal Power Commission in the regulation of the natural gas companies subject to its jurisdiction ever fixed the amount to be paid by a natural gas company to any royalty owner by such natural gas company? A. No, sir, the Commission has never fixed the amount of the royalty payment by a natural gas company which is a producer to a royalty owner.

BLEED THROUGH

BLURRED COPY

[5613]

Q. Has the amount paid been recognized as a cost in all matters where costs are involved and under consideration? A. Yes, sir.

Q. Are natural gas companies under any circumstances required to obtain certificates of public convenience and necessity for the construction or operation of gathering lines or facilities? A. No, sir, they are not. In fact, in one case the Commission specifically disclaimed jurisdiction where a certificate had been applied for.

Q. What was that case? A. That was the case of Arkansas-Louisiana Gas Company, and is cited in 7FPC766.

Q. When you say 7FPC766, you are there referring to the reports of the Federal Power Commission? A. I am.

* * *

[5614]

Cross-Examination by Mr. Sparks

Q. Mr. Stockwell, what is the purpose of gathering? A. To assemble the gas.

MR. TORKELSON: Mr. Examiner, may we request that the witness speak louder so we can hear him over here?

PRESIDING EXAMINER: Yes, will you speak a little louder, please?

THE WITNESS: The purpose of gathering is to assemble the gas to a common point and then deliver it into a transmission system or deliver it to a point of disposal.

BY MR. SPARKS:

[5615]

Q. Let's assume—

MR. McALLISTER (interrupting): Will you speak up a little louder so the witness can get all the question, Mr. Sparks?

MR. SPARKS: I'll try to, Mr. McAllister.

MR. McALLISTER: I'll appreciate it if you would. If I can't hear it plainly, I'll have to ask that it be read and I want to avoid that if I can, Mr. Examiner, but it is for the benefit of the witness.

PRESIDING EXAMINER: Yes.

BY MR. SPARKS:

Q. Now, let's assume that wherever gathering ends under your concept of gathering the gatherer at that point delivers the gas to a transmission line, however you define transmission line. Do you understand the question? I mean the statement. Now, the question is what was the purpose of that gathering? A. You say what was the purpose of that gathering?

Q. Yes. A. On your assumption that it is gathered and brought to a point where it is delivered into transmission lines?

Q. No. The assumption is that the gatherer gathers it to the point, whatever that point may be, where you say that gathering ends, and at that point sells it and delivers it to a transmission line, and the question is what was the

[5616]

purpose of that gathering? A. On that assumption the only purpose I can see is to make the delivery.

* * *

BLEED THROUGH BLURRED COPY

[5623]

Q. That is right, you may presume if you wish there is no market. My question to you is what is the purpose of that gathering? A. If you did that, which would be rather unusual in the experience I have seen in the industry, I can assume no purpose you'd have in gathering that gas to bring it to that point to flare it under those conditions unless you wanted to burn it all through one flare instead of a flare at each well.

Q. Well, you may assume that is what you want to do? A. That would be your purpose to burn the gas so you could dispose of it through one flare instead of several flares.

Q. When were you in Oklahoma? A. Do you mean—

Q. (Interrupting) What year? A. When was I there?

Q. Yes.

[5624]

A. From 1921 to 1931.

Q. Had the Oklahoma City field been discovered at that time? A. Had what?

Q. Had the Oklahoma City field been discovered at that time? A. Yes, sir, I believe it had. I don't remember. Yes, I believe it was.

Q. Did you live in Oklahoma City? A. Yes, sir.

Q. Don't you know that there were millions of cubic feet of gas flared in exactly the manner in which we are speaking of out of that Oklahoma City field? A. I know there has been considerable gas flared there and part of it may have been assembled through gathering lines and

flared through one flare and part of it has been flared through single flares from the one well, I know that, too.

Q. But you don't know whether it had been gathered from several wells and flared through a single flare? A. I don't know of any that has been gathered through a number of lines and flared through a single flare, but that undoubtedly has been done. It has been done on gasoline plants where they didn't have a market for it. That is gathering it and bringing it to a processing plant and after processing they have flared the residue down there in some cases. That would be

[5625]

in line with your supposition, excepting in that case they have a processing plant and in the case you mentioned they didn't have a processing plant.

Q. In the instance you mentioned, what would be the purpose of the gathering there? A. The purpose of the gathering there would be strictly an economic proposition to get what gas they could gathered to deliver it to a processing plant and the purpose of gathering to bring it to that processing plant would be to process it and get what money they could out of the products they could take out of it through a processing plant before they flared it if they had no market for the residue.

* * *

[5649]

Q. Mr. Stockwell, I hand you exhibit No. 188. Do you see on that exhibit some small round circles? A. Yes, sir.

BLEED THROUGH

BLURRED COPY

[5636]

MR. SPARKS (interrupting): I asked him the question whether or not the gas through those four lines had been collected together in a single mass of gas prior to the time when it entered the common header at the intake of the engines. That was the question, and I want it answered.

PRESIDING EXAMINER: Speaking now purely of a physical situation, do you understand the question?

THE WITNESS: Answering his question on that basis only and not as a measure of where the gathering ends, it is very evident to anybody that all the gas never gets into that plant until all the gas gets in from all those lines into one spot.

BY MR. SPARKS:

Q. Then under your concept of gathering, gathering ends before the purpose of the gathering is accomplished? A. No, sir.

BLEED THROUGH

BLURRED COPY

NO PAGE NUMBER

Assume that those are gas wells? A. Assume that they are what?

Q. Gas wells. A. Gas wells.

Q. And you also see some solid lines, do you not? A. Dotted heavy lines, yes, sir.

Q. No, I say you also see some solid lines? A. Solid lines, yes, sir.

Q. And by the side of which there are some numerals? A. That is right.

[5650]

Q. For example, one of them has the numeral 4 with two dots by the side of it, meaning four inch. That is the common method of designation for four inch, is it not? A. That is correct.

Q. And you also see a heavy dotted line, do you not? A. A heavy broken line, yes, sir.

Q. And the heavy broken line is marked transmission line? A. It is.

Q. Now assume that company "A" owns all of the wells on Exhibit 188 that are located on the right-hand side of the longer line which runs generally from the bottom of the exhibit towards the top of the exhibit. A. The line you have marked 6, 8 and 10 inch?

Q. Yes, sir. A. Yes, sir.

Q. And assume that other producers own the wells which are located on the left-hand side of that line and that company "A" has a contract to purchase the gas produced from those wells from those producers, the purchase to be made and the delivery to be made to company

"A" at the wells. A. Pardon me for interrupting, but the wells on the left-hand side are purchase gas wells?

Q. That is right, other producers. A. And the wells on the right-hand side are—

Q. (Interrupting) The wells on the left-hand side are

[5651]

wells from which gas is being purchased by company "A" and the wells on the right-hand side are wells on leases that are owned by company "A" itself. A. And your right and left-hand refers to you standing on the 6, 8 and 10 inch and facing the transmission line?

Q. Right. Assuming company "A" lay the lines which are marked on this diagram as 4-inch, 6-inch, 8-inch and 10-inch and takes gas from each of the wells and sells and delivers such gas to company "B", which owns and operates the transmission line, the heavy broken line on the diagram, and assume that the point of delivery of the gas into the transmission line of Company "B" by company "A" is at the point shown on the diagram where the 10-inch line joins or connects with the transmission line? A. In other words, there is a sale measure station up there at that point?

Q. And assume that there is a metering station on the 10-inch line just prior to the delivery or connection of the 10-inch line into the transmission line, and that all of that solid lines are owned and operated by company "A". Under your concept of gathering where would gathering end under the operations which have been assumed and as related to the diagram, Exhibit 188? A. The diagram 188

BLEED THROUGH

BLURRED COPY

shows no distances on the gathering system thereon. From this diagram and not knowing anything about

[5652]

the layout other than appears on this diagram I would say gathering ends at the transmission system just the same as I said in my direct testimony.

Q. I take it by that that you mean at the point where the delivery is made into the various lines— A. (Interrupting) Where company "A" delivers to company "B", which, you stated, was in the immediate vicinity of the transmission line or the point of connection of the company "A's" lines with company "B's" lines.

Q. Would you place an "X" on Exhibit 188 at that point so there won't be any question in the record as to the point.

MR. McALLISTER: How are we going to show that that was put on there by the witness?

MR. SPARKS: Because the testimony will reflect it.

MR. McALLISTER: Mr. Examiner, I object to any change being made on the exhibit because that is in the record and I presume we are going to get copies of it.

THE WITNESS: I'll take it off. I haven't put anything on there yet.

PRESIDING EXAMINER: That is the difficulty we ran into, of course, in connection with having the witness mark lines on the other maps. I think it does present something of a problem.

MR. SPARKS: It is a different proposition, though Mr. Examiner, where the exhibit is the exhibit of the

party who is requesting that the point be marked on the exhibit and also a

[5653]

different proposition when none of the duplicates have been made. These will have to be made by photostat so anything put on there will undoubtedly appear on the photostat.

MR. McALLISTER: That doesn't help the problem at all for the simple reason the exhibit has been marked and as marked it is an entity and the maps we had before there were errors on them and it was merely trying to work out some arrangement whereby the maps that respondent had submitted could be corrected, and we did it in what we thought was the reasonable way, but we did run into difficulty.

This is an entirely different situation. We have an exhibit here and to have the witness directed to put marks on there hither and yon, it can be very well definitely stated where the point is.

MR. SPARKS: I'm not making any point of it. As a matter of fact, I can see from the marks that the witness did make on the exhibit that it might serve to confuse rather than clarify.

MR. McALLISTER: It wasn't what you expected?

MR. SPARKS: It wasn't what I expected.

PRESIDING EXAMINER: All right, let's proceed.

MR. SPARKS: Because I want the matter to be clear in the transcript and in order that it will be absolutely clear, I take it from the witness's testimony that the gathering ends at the point where the solid line connects into

BLEED THROUGH

BLURRED COPY

the dashed line marked "transmission line", which is the point at which we have assumed

[5654]

the delivery was made to company "B", the transmission company.

BY MR. SPARKS:

Q. That is what you said, was it not? A. I have stated that from this chart without any measurements on it or anything, that is the best place I could conclude that it ends. Now, if the distance might be considerable between the last well entering into that gathering system and the company "B's" transmission line there might be a portion of that line that was actually company "A's" transmission line, part of the solid line there. I don't know what your distances are and your diagram doesn't show.

Q. Assume that the gas from the last well as shown on the diagram goes into that line at a point which was a mile from the point at which the solid line connects with the transmission line but still within the field of production. Would not that mile of line still be a part of company "A's" gathering system? A. It might or might not depending upon the manner company "A" decided to designate it. The fact that the line is running through a producing field does not determine that it is a gathering line. If there is a mile in there that gathering has not been completed before it traverses that mile, and a mile would hardly be a distance that anybody would be too particular about whether they called it a gathering line or a transmission line, but the fact that it is in the producing field

makes no difference, it has no bearing upon what that line is. We have lots of

[5655]

transmission lines in producing fields, transmission lines.

Q. What is the distance which determines whether it is a gathering line or a transmission line from the point where the gas enters the gathering system from the last well and the point where the delivery is made to the transmission line? A. When your gathering function is completed on a certain system and there is no more additions made to that streamlined flow that is on its way either to the inlet side of a gasoline plant or to a transmission line, I think gathering has been completed. Of course, I realize, as well as you, that at sometime in the future another well may be drilled along that interval at which time a part of the line that would have previously been termed transmission would naturally convert to part of the gathering system.

Q. I believe you stated that the function of the gathering where the gas was delivered to a transmission line, as in this example, was for delivery of the gas for transmission, did you not? A. I didn't understand all that question. I think I did but would you read it please.

(The question was read by the reporter.)

MR. McALLISTER: I don't understand the witness related that answer or any such answer to this problem.

THE WITNESS: I did—pardon me.

MR. McALLISTER: Go ahead.

BLEED THROUGH

BLURRED COPY

THE WITNESS: I said that the function of gathering was to

[5656]

deliver the gas to a point where it could be transported through a transmission line to ultimate point of delivery, but I didn't say that the mere fact that you have named this one line a transmission line and you have drawn lines to it, that no part of the line that you drew to it couldn't be a transmission line to which that gathering system was carrying gas.

BY MR. SPARKS:

Q. I understand that, but you stated that if the distance between the point where the last well came into the 10-inch line and the point of delivery at the transmission line was a mile that it wouldn't make much difference which way it was classified? A. I think it would be rather immaterial whether you called it transmission or gathering line, that little piece, while theoretically and actually all gathering has been completed at the time the 4-inch line from that last well nearest the pipe line enters that line, but I think there would be a question about calling the rest of that line from that 4-inch connection to the 10-inch there, from that point up to the transmission line, a gathering system if it was 10 miles or something like that in there between that point. I wouldn't be inclined to call all that line a gathering line.

Q. In making your last statement, Mr. Stockwell, are you testifying as to how you would classify it or as to the concept of gathering as it is used in the industry? A. I'm talking about the concept of gathering in the

[5657]

industry that I understand from various operators in the industry. After all, there has to be some practical common sense used in the determniation of these matters. It can't all be done by some rule down to the last foot.

Q. Then it is largely a matter of opinion, is it not, within certain limits, of course? A. I would say that the individual operators opinion has a lot to do with just when he would call that interval between the last 4-inch connection and this here transmission line, when he would call it a transmission line and how long he would leave it a field line, yes, sir, I mean a gathering line.

MR. SPARKS: We request that a yellow sheet containing a number of lines and some figures be marked for identification as Exhibit No. 189.

PRESIDING EXAMINER: It will be so marked.

(THE DOCUMENT ABOVE REFERRED TO WAS MARKED AS EXHIBIT NO. 189 FOR IDENTIFICATION.)

[5658]

BY MR. SPARKS:

Q. I hand you now Exhibit 189 and ask you to assume the same facts and situation which was assumed with reference to Exhibit 188, but in order that it will be easy, just assume that the distance between the point at which the last gas is delivered into the solid line, the 10-inch line, and the connection to the transmission line is, oh, say, a couple of hundred yards. A. That is, between the 10-inch residue line from the processing plant—

BLEED THROUGH

BLURRED COPY

Q. (Interrupting.) No, the point at which the last gas is delivered into the 10-inch line from a well through a line which is marked "4-inch" and the point at which there is an intersection of a 10-inch line with the transmission line. A. Yes, sir.

Q. In other words, that is the distance between those two points? A. Two hundred feet?

Q. Well, make it two hundred feet. That is good enough. Two hundred yards is what I said. It doesn't make any difference, I don't believe. A. O. K.

Q. In Exhibit 189 there is a block valve in the 10-inch line which is marked with "X" and which lies between

[5659]

the point where the gas from the last well enters the 10-inch line through a 4-inch line and the transmission line. You observe that "X"? A. I do.

Q. That block valve is closed, and there is a take-off upstream from the block valve carrying all the gas which is taken into the 10-inch line a distance of another two hundred feet at right angles to the 10-inch line to a circle, to a processing plant, which is marked on your diagram as a circle. Do you see that? A. I see that.

Q. And that gas has come through the processing plant which we will assume is an absorption type processing plant, and the residue gas from the absorbers and from the overhead vapors of the fractionator are taken through the 10-inch line as shown on the diagram back to the 10-inch line which intersects with the transmission line at a point which is downstream from the block valve.

5659

Anyway the take-off to the plant after the last gas is delivered into the 10-inch line and before it gets to the block valve, which, of course, blocks the gas off at this point. A. Where is that pop valve you are talking about?

Q. The block valve. A. Oh, the block gate, yes.

[5660]

Q. And that block gate is closed, and my question to you is where the gathering ends when the gas from these wells is taken into the processing plant and the heavier hydrocarbons extracted and the residue gas from the overhead vapors from the fractionator deliver to the transmission line at the same point at which delivery was made on Exhibit 188.

MR. McALLISTER: Mr. Examiner, may we have that question read, please?

PRESIDING EXAMINER: Read the question.

(Question read by the reporter.)

[5661]

MR. McALLISTER: In this question related to Exhibit 189 it is referred to as a processing plant and another place as an absorber. We can eliminate that if we knew where the fence line was around that plant. If the circle is the entire plant in the enclosure that is one thing, and if that is the absorber, that is quite another thing, but as it stands now, it is impossible even with the question clear to understand what this entire matter involves. It is a very rough sketch of the presumed problem and the plant fence is not shown. They say 200 feet over there

BLEED THROUGH

BLURRED COPY

and it is 200 feet from the transmission line down to the last 4-inch line that is coming in, so that if there is 200 feet in relation to that it looks like it is a segment of the inner works of the gasoline plant, maybe the absorber, I don't know.

I object to the question and the diagram when a question is related to the diagram in this fashion, unless it is made perfectly clear.

PRESIDING EXAMINER: The objection is overruled.

Do you understand the question, Mr. Stockwell?

THE WITNESS: I think I can state it and see if I do understand it.

PRESIDING EXAMINER: All right.

THE WITNESS: Did I understand in the first place, Mr. Sparks, this is the same four purchase wells and two producer wells we had on the other diagram?

BY MR. SPARKS:

[5662]

Q. That is correct. A. And the gas is gathered through these lines and brought up to a point near this block gate?

Q. That is right. A. Where it is delivered into the processing plant through a line shown here to the right?

Q. That is correct. A. And passes through the processing plant and is returned to the 10-inch line on the downstream side of the block gate and delivered into the transmission line.

Q. That is, the residue gas. A. The residue gas, that is what I mean.

Q. That is correct. A. And your question is where does

gathering end in this instance?

Q. That is correct. A. In answering this question I am assuming your circle represents the outside limits of a regular processing plant that you have got there.

Q. Very well, go ahead.

BY MR. McALLISTER:

Q. Do you mean fence line? A. What? Fence line, yes, including all—in that case, as I have stated, in my previous testimony, gathering ends at that fence line or at the outside edge of the processing plant on the

[5663]

inlet side of that processing plant.

BY MR. SPARKS:

Q. Very well, now, let's crack that block valve and let half the gas go directly into the transmission line without going through the processing plant and half of the gas go through the processing plant as in the previous question. My question to you then is when does gathering end as to the two lots of gas? A. Well, you have a situation in that connection that is not usually found, not very often found. And so far as I can see since the processing plant is no part of a gathering system, your gathering system there would be ended insofar as the gas passing to the processing plant at the inlet side of the processing plant, but the gas going straight through would have to be considered as gathering system, I suppose, until you got to the transmission line. That is a very unusual and extraordinary case. If your are going to put a processing plant there, I don't know why you would put one there unless

BLEED THROUGH

BLURRED COPY

you intended to process the gas that was available for processing.

* * *

[5670]

HARRY F. STEVENS

resumed the stand, and having been previously duly sworn, was examined and testified further as follows:

[5671]

Cross Examination by Mr. Sparks

Q. I believe you stated, Mr. Stevens, yesterday, that after you graduated from the Colorado School of Mines with a degree of Petroleum Engineer in 1923, your first employment was with the Empire Company in Bartlesville, is that right? A. Yes.

Q. What were your duties in that employment?

I'll make that more specific. As I understood your testimony you said you were transferred in 1924 to the Henry L. Doherty Company, so I'm speaking of the period when you were working for the Empire Company, which was in 1923. A. Yes, sir. I think you refer to that period which might be generally described as during the junior engineer's course, it is generally referred to.

Q. That is a course that was given by the company to young engineers when they are employed, is that right? A. As I recall at that time every young engineer came into the employ of the company went through that course if

you were an engineer, and by "course", perhaps the term is a little bit loose. It consisted of assignments to various types of experience and

[5672]

it is a course in the sense that you gained some instruction and you also worked, so that was the character, the intent and character of the assignment.

Q. How long did that last, that course? A. I believe the course was two years, and whether one continued the full two years of the course depended on whether during this schedule of assignments he found something that he thought he would like to continue work in or someone requested his services in a particular activity and he accepted a permanent assignment to that activity, whether it be production or what-not.

Q. Of what did the course consist insofar as you took it? A. In my case, my first assignment, and I think I can keep these in chronological order, was the keeping of time and costs on a natural gas pipe line construction job in Kansas.

Q. In Kansas? A.Yes, sir.

Q.Did that continue up to the time you went with the Doherty Company? A. No, sir.

Q. Well, then, go ahead. What was your next assignment. A. The next one was the construction of an oil pipe

[5673]

line job of which I had charge. It was an assignment that covered, I think, about three months, although I'm sorry

BLEED THROUGH

BLURRED COPY

but I don't think, I can be specific as to these intervals.

Q. It has been a long time ago. A. Yes, sir.

Q. And do you recollect where part of that was, where that line construction was? A. It terminated at the Cushing Refinery.

BY MR. McALLISTER:

Q. Where is that? A. Oklahoma.

BY MR. SPARKS:

Q. After that assignment do you recall your next assignment? A. After that I was assigned to the refinery division which involved two phases of work, for a short time I was in the Tulsa office of the refinery division, and as I recall there I was studying whatever literature was available in the library, and, as I recall, there was some operating statistics. That phase of the assignment was relatively short, and I then went to the Cushing Refinery where I did some work in experimental gasoline treating. At the conclusion—

Q. (Interrupting): Is that an oil refinery you are

[5674]

speaking of, at Tulsa? A. Yes, sir, at Cushing.

Q. Cushing, yes. A. The next one following that, the next assignment following that, was an oil production at Oil Hill, Kansas. It was at that time and during that assignment that my assignment was requested to Henry L. Doherty and Company at New York, and I left on that assignment.

Q. Were you employed in New York on that assignment? I mean when you were with the Doherty Company.

Did you live in New York? A. Yes, sir.

MR. McALLISTER: Might I ask a question?

BY MR. SPARKS:

Q. I believe according to your testimony you were with them from 1924 to 1927, working principally on statistical analyses? A. That was my principal activity, yes, sir.

[5675]

Q. I believe you stated then that in 1928 you were temporarily assigned to the gas division of the Empire Company, is that right? A. I think I stated there another intervening activity. I think I am sure I did. My first activity on being reassigned to the Midcontinent area was a search for oil leases which were to be later repressured.

Q. That is stated in your statement, and I related it to your employment with the Doherty Company, but that was after— A. (Interrupting) No, sir, it isn't. That was back with the Empire Companies again.

Q. You were engaged in searching for oil leases that might be purchased for repressuring operation, as I understand? A. Yes, sir.

Q. How long did that assignment continue? A. I don't know whether I can tell you that or not. I don't believe I can tell you that except it was in the order of a few months.

Q. That is sufficient. At any rate, at the terminous of that assignment you continued with the Empire Company, and it is not material which one, on a temporary basis for the purpose of testing, I believe you stated, some 600 wells of the Missouri-Kansas Pipe Line Company? A. I think that is a little bit in error. I was not continued on a temporary basis for the Empire Companies. I was

BLEED THROUGH

BLURRED COPY

[5676]

requested for a temporary assignment for the testing of these wells.

Q. What type of tests did you perform on the wells? A. These were ordinary Pitot Tube tests or orifice well tester tests of gas wells. It is obvious from this that the wells were not large wells.

Q. And I believe you stated that your next assignment concerned the investigation, experiment and development of underground storage in depleted gas fields and gas storage by other means, is that correct? A. Yes, sir.

Q. And you continued in that work until 1936, is that right? A. Yes, sir. With the addition of minor other work, which to which, that was the major.

Q. Then from 1936 until 1939 you were employed by Stanolind Oil and Gas Company? A. Yes, sir.

Q. And I believe that you stated that your work with Stanolind had to do primarily with determining the economics of development programs on oil leases, is that right? A. That was only one phase of it. I didn't intend to restrict the description of experience to economic analysis of the work I did. As a matter of fact, it was engineering work and we were always required to economically analyze the work of the work-over, in case it were a work-over, of the development

[5677]

program, if that were it, and of the pressure maintenance program, if that were it. It was a component part of all engineering work done in the production department of

Stanolind at that time, at least, to consider the economic aspects of the work, but the work in a major sense was engineering, which as again as characteristic of Stanolind involved geological support and investigation.

Q. The various matters that you worked on in your employment with Stanolind were related primarily to the advising of the company with reference to problems affected by geology? A. No, sir.. The geology and the economics were aspects or related aspects to engineering as the major activity and component in all such work.

Q. None of your work with Stanolind related to the operation of a gasoline plant, did it? A. No, sir, except in those cases where pressure maintenance was involved, and then only to the extent that it applied to the engineering aspects, that is to say, that does exclude any consideration of the operation as such of such plants.

Q. In other words, it was only to the extent that the operation of a gasoline plant and the revenues from it might affect the economics of contemplated repressuring projects that you were concerned? A. That is right.

Q. I believe you stated that you were employed by the Federal Power Commission in 1939 and have been so employed with

[5678]

the exception of a period of four years when you were in service in the navy? A. Yes, sir.

Q. I believe you also stated that you were in the gas certificate division, is that right? A. Yes, sir.

Q. What has been the character of your work with the

BLEED THROUGH

BLURRED COPY

Federal Power Commission since 1939? A. The character of the work has been the estimation of natural gas reserves, the collection of field and basic data relative thereto, the construction of exhibits and testimony thereon in connection with said reserves, the construction and presentation of deliverability exhibits.

Q. By deliverability, what do you mean there? A. The ability of gas wells to deliver gas. That aspect, of course, also includes the collection of basic data naturally. I think that can be implied in any of this. That brings us more or less up to the period of the war, after which for, I guess, about two years my work related to investigation of a great variety and types of exhibits presented before the Commission in dockets requesting certificate of public convenience and necessity for natural gas pipe lines.

Q. By that do you mean that you for the Commission analyzed exhibits that had been offered in connection with applications for certificates of public convenience and necessity,

[5679]

is that what you mean? A. Yes, sir. These exhibits varying in character from market exhibits to and including engineering exhibits of various kinds, pipe line design, operation.

Q. Does that bring it pretty well up to date? A. No, sir. I was about to say gas reserves and deliverability and that is true although it is true for a lesser extent than for the period which I am now about to mention, and that does bring us up to the current period which has covered the last two or three years, in which reserves and delivera-

bility have been the major, my major, activities, and the reason for that is organization of natural gas resources section for that purpose.

Q. Mr. Stevens, have you ever operated a gasoline plant? A. No, sir.

Q. Have you ever operated a gathering system? A. Well, I hesitate in an affirmative answer or a negative answer to your question because in the development of natural gas storage projects, we had in three instances of fields, that is, and several subinstances regarding those fields where gas was experimentally injected into the ground and was produced therefrom in the same manner as if they were normal producing fields, in which activities and activities involved in that testing and later in the operation of those storages when more completely repressured we have in those instances the exact duplication of the operation of a normal gas field, and in that

[5680]

operation there was certainly involved facilities which are referred to here as gathering system.

Q. Who were you working for at that time? A. Cities Service Gas Company.

Q. Did you have actual supervision over those activities? A. During those periods of test I did.

Q. You had supervision during the testing period? A. That is right, yes. That is to say, I don't wish to reflect any undue conveyance of authority in the operation of the Cities Service system, we selected the time when we wanted to do this work and did so in correlation with

BLEED THROUGH

BLURRED COPY

the pressure dispatching, but during that period that part of the system was subject to our plans and activities of testing. I do not wish to go beyond that.

Q. Did you ever design or supervise the construction of a gasoline plant, processing plant? A. No, sir, except in the limited sense that one does so during a course of petroleum engineering, not for the construction of such a plant in actuality in any given field.

Q. Have you ever had any experience in the purchase or sale of gas at the wells? A. Do I understand by your question that is have I made contract with producers?

Q. The purchase or sale of gas. A. No, sir, I have not, but I have examined hundreds of

[5681]

them in connection with my duties at the Commission.

Q. Have you ever made any contracts for the purchase or sale of residue gas from a gasoline plant? A. No, sir, the same answer applies.

Q. During the course of your experience have you ever for any concern for whom you have worked negotiated the purchase or sale of a gasoline plant? A. No, sir.

MR. McALLISTER: May I have that question read, please, the sale of a plant?

PRESIDING EXAMINER: Read the question, please.

(The question was read by the reporter.)

MR. McALLISTER: Mr. Examiner, I don't know if that is clear. Does that include the gathering system under Mr. Bunn's theory? I think the witness is entitled to know what he means by a gasoline plant under the theories that

have been advanced here until it is defined or the witness is permitted to define what he understands by gasoline plant.

PRESIDING EXAMINER: Well, he can do that.

THE WITNESS: Well, I understand a gasoline plant as that group of facilities within the compound which is a compound closely associated geographically and physically which is designed and erected and operated for the removal of gasoline.

BY MR. SPARKS:

Q. As you have defined it, go ahead and answer the

[5682]

question. A. I have not. In other words, the answer is no to your question.

[5683]

Q. Have you ever been inside a gasoline plant which is processing casing-head gas? A. Yes. In the Texas Panhandle Field, but I can't tell you which one it was. We passed one one day and stopped to go through it. I think it was a plant owned by the Panhandle or a plant which processed gas which went to the Panhandle Eastern Pipe Line Company, but I couldn't tell you which one it was.

MR. McALLISTER: Maybe it was the Sneed plant.

THE WITNESS: No.

BY MR. SPARKS:

Q. Did you understand the plant was processing casing-head gas? A. Oh, casing-head gas. I beg your pardon. I do not know. I was referring to the processing of the so-called dry gas.

BLEED THROUGH

BLURRED COPY

Q. Gas well gas? A. Yes, gas well gas. I think that plant was not a processing plant for removal of casing-head gas.

Q. In other words, as far as you can recollect, you have never been in a processing plant which was processing casing-head gas? A. Not as far as I can recall.

Q. And the only gasoline plant of any kind that you can recollect ever having been in is one plant in the Panhandle

[5684]

Field, is that right? A. I think that is true, too, yes, sir.

Q. How long ago was that? A. That was about 1940.

Q. You don't recollect— A. (Interrupting.) I'm sure it was 1940, because we were in that area in 1940.

Q. And you think that was a plant of Panhandle Eastern's in the Panhandle Field? A. I think it was, or a plant from which Panhandle Eastern obtained or took the gas. However, I'm not certain of that either. That is my impression, and, of course, I don't see really what difference that would make whether it was Panhandle or someone else.

* * *

[5691]

MELWOOD W. VAN SCOYOC

resumed the stand, and having been previously duly sworn, was examined and testified further as follows:

PRESIDING EXAMINER: Counsel for the respondent may cross-examine the witness.

Cross-Examination by Mr. Sparks

Q. Mr. Van Scoyoc, you testified yesterday, I believe, that 54 companies who were classified by the Commission as "A" and "B" companies and who made reports to the Federal Power Commission as Natural gas companies were producers of gas, did you not, from the wells that they owned? A. I did, sir.

Q. And that of those 54 companies, you testified that 17 produced gas in a seven-state area in the southwest which was composed of Texas, New Mexico, Arkansas, Louisiana, Mississippi, Oklahoma and Kansas, is that right? A. That is correct.

Q. You also testified that the 54 companies owned and operated some 30,162 gas wells, is that right? A. That is right.

[5692]

Q. As of what date were your figures on that— A. (Interrupting) That was reported as of December 31, 1949.

Q. How many of those 30,162 gas wells are owned by the 17 companies which produce gas in the seven-state southwest area? A. I don't have them added up, but I can give them to you by companies.

Q. If you will, just identify the company and the number of wells, but first let me ask you this question, will your answer include all the wells of those 17 companies or only those wells of the 17 companies which are located in the seven-state southwestern area? A. It will include only the wells of those companies which are located within the seven states. I can give them to you by states if

BLEED THROUGH

BLURRED COPY

you want them that way or a total for the company.

Q. Give them by states. A. Arkansas-Oklahoma Gas Company, 96 wells in Arkansas, 29 in Oklahoma.

Hope Producing Company, 39 wells in Louisiana.

Kansas-Colorado Gas Company, 4 wells in Kansas.

Southern Natural Gas Company, 26 wells in Louisiana.

Southern Union Gas Company, 4 wells in Texas, 5 wells in New Mexico.

Texas Gas Utilities Company, 3 wells in Texas.

Union Gas System, Inc., 78 wells in Kansas, 58 wells in

[5693]

Oklahoma.

Interstate Natural Gas Company, Inc. 233 wells in Louisiana.

Panhandle Eastern Pipe Line Company, 174 wells in Kansas, 32 wells in Oklahoma, and 69 wells in Texas.

Texoma Natural Gas Company, 231 wells in Texas.

Canadian River Gas Company, 202 wells in Texas.

Kansas-Nebraska Natural Gas Company, 18 wells in Texas.

El Paso Natural Gas Company, 24 wells in New Mexico.

Cities Service Gas Company, 6 wells in Kansas, 153 wells in Oklahoma, 145 wells in Texas.

Arkansas-Louisiana Gas Company, 14 wells in Arkansas, 57 wells in Louisiana, 84 wells in Texas.

Northern Natural Gas Company, 167 wells in Kansas, 36 wells in Texas.

Consolidated Gas Utilities Company, 4 wells in Kansas, 27 wells in Oklahoma, 53 wells in Texas.

That completes all of the gas wells for the 17 companies. There are several of those companies which also have oil wells.

• • •

[5697]

Q. State, if you know, the number of producers who own and produce gas wells, gas from which is sold to one or more of the companies reporting to the Federal Power Commission as natural gas companies, but which producers do not themselves report to the Federal Power Commission as natural gas companies?

MR. McALLISTER: May I have that question read?

PRESIDING EXAMINER: Read the question.

(The question was read by the reporter.)

MR. McALLISTER: I just want to be sure—

THE WITNESS (interrupting): I don't understand the question. I wonder if I might have that read again.

(The question was read again by the reporter.)

MR. McALLISTER: Do you mean people like Skelly or Magnolia, is that what you mean, Mr. Sparks?

MR. SPARKS: Yes, and Phillips.

MR. McALLISTER: Phillips?

MR. SPARKS: And how many hundred thousand others there may be. I am just asking if he knows how many there are:

THE WITNESS: There were some figures compiled, I believe, about 1946 or '47 which were compiled from reports to the Federal Power Commission by the natural gas companies reporting to the Commission, showing the total number of producers and gatherers in the category

BLEED THROUGH

BLURRED COPY

which you named. I believe there were about 2,300 such producers of which about 600 were in the seven southwest states.

[5698]

BY MR. SPARKS:

Q. In that tabulation, if a gatherer purchased gas from other producers and gathered the gas and then sold it either before or after extracting the liquids to a company reporting to the Federal Power Commission as a natural gas company, would that count it as one gatherer and producer or in that tabulation did you count in all of the producers from whom the gatherer purchased? A. All that tabulation showed, as I recall it, was the names or the number of companies from which companies reporting to the Federal Power Commission purchased gas.

Q. Made direct purchases? A. And I don't think it would include people who might be selling to—well, take, for example, to make is specific, a company like American Gas Production Company, which might be selling gas to Phillips in the Texas-Hugoton field, and Phillips would then resell that gas to Michigan-Wisconsin Pipe Line Company. I don't believe it would include that category of companies because the reports of the Federal Power Commission would not ordinarily disclose that.

• • •

[5709]

Q. The report shows, does it not, that for the year 1947 and for all natural gas companies in the country there was purchased from independent producers and gatherers

57.94 per cent of the gas supply of all such natural gas companies? A. That is correct.

Q. And for the seven-state area of Arkansas, Louisiana, Kansas, Mississippi, New Mexico, Oklahoma and Texas, for the year 1947, that purchased from independent—it says independents, does that mean independent producers and gatherers? A. I believe that would mean the same thing.

Q. That purchase from independent producers and gatherers was 61.76 per cent of the total supply of said companies? A. That is correct.

Q. Then you also prepared an estimate of the percentage of the total supply of natural gas companies reporting as such to the Federal Power Commission which would be produced by said companies and affiliates and which would be purchased from independent producers for the year 1952, taking into account no pending certificate applications before the Commission with the exception of that of Tennessee Gas Transmission Company, in Docket G-962, isn't that right? A. You said you prepared. I didn't personally prepare the

[5710]

data, but it was prepared under my supervision and direction and I believe the figures are reasonable.

Q. And that estimate for all companies reporting as natural gas companies to the Federal Power Commission for the year 1952 reflects that 29.64 per cent of their total gas supply will be produced by said pipe line companies and their affiliates, is that right? A. That was the esti-

BLEED THROUGH

BLURRED COPY

mate that was made at the time this was prepared in '47, I believe, or '48.

Q. And— A. (Interrupting) Based on applications which had been filed by natural gas companies covering projects and the purchase gas contracts which were a part of those applications, which applications had been granted with the single exception of the Tennessee application to which you referred, which was pending at that particular time and has subsequently been granted.

Q. And with regard to all companies reporting as natural gas companies the report reflects that 70.36 per cent of their total supply would be purchased from independent producers? A. That was the estimate, yes, sir.

Q. And with regard to the 22 interstate pipeline companies reporting as natural gas companies to the Commission in the seven-state area we have been talking about, the estimate was that 76.75 per cent of their total requirements would be purchased from independent producers, is that right?

[5711]

A. Yes, sir, that was the estimate.

* * *

[5726]

Q. I just want to know whether you are sufficiently familiar with the exhibit to answer this question. In the event Phillips Petroleum Company should be held to be a natural gas company and the sales made by Phillips Petroleum Company to any Interstate Pipe Line Companies, the delivery of which occurs in the counties of

Moore, Hartley, Sherman, Hansford, Texas, and Texas County, Oklahoma—

MR. SPARKS: I'd like to have the question read to that point.

PRESIDING EXAMINER: Read the question.

(Question read.)

BY MR. SPARKS:

Q. —are subject to rate determinations by the Federal Power Commission, and in the event that any of those sales prices as are contained in the sales contracts are ordered reduced by the Federal Power Commission, is it not a fact that royalty owners who receive royalties under this form of gas royalty agreement would be affected by such reductions in price and their royalties payable to them be reduced?

• • •

[5727]

PRESIDING EXAMINER: Do you understand it, Mr. Van Scoyoc?

THE WITNESS: Yes, I understand it. The answer would be no.

• • •

[5730]

Q. All right, how do you determine, Mr. Van Scoyoc, that any reduction in the sales price which might be ordered by the Federal Power Commission of any sales of Phillips Petroleum Company in this five county area, would not have any effect on the royalties to be received by the royalty owners under this agreement?

• • •

BLEED THROUGH

BLURRED COPY

THE WITNESS: Well, the gas royalty agreement to which you referred, Exhibit 109, is a contract between Phillips Petroleum Company and the royalty owner, and it is subject to whatever agreement there may be between the parties, subject to modification and thousands of them have been modified as so testified in this proceeding, to change the basis of the royalty payment, and the mere fact that the Federal Power Commission might fix a price below the so-called weighted

[5731]

average price per Mcf received by lessee from all sales of gas, which is in Moore, Hartley, Sherman and Hansford Counties, Texas, and Texas County, Oklahoma, would have no bearing on it at all.

BY MR. SPARKS:

Q. It wouldn't have any bearing or relationship on this contract at all, you don't think so. A. No, sir. Phillips has modified all kinds of royalty payments. We fixed the rates of Panhandle, Cities Service, Northern Natural and as far as I know no royalty payment was affected by it.

Q. You don't know whether they had any such agreements as this, do you? A. I know they had agreements which are similar to this, yes, sir.

Q. You know they weren't similar to this, Mr. Van Scoyoc.

MR. McALLISTER: Mr. Examiner—

MR. PERDUE (interrupting): Here we go on arguing with the witness again.

PRESIDING EXAMINER: Yes, we have a lot of it.

Go ahead.

BY MR. SPARKS:

Q. You know those provisions provide for a flat rate in cents per thousand, don't you, Mr. Van Scoyoc?

[5732]

A. I think most of them did, yes sir.

Q. You know this agreement does— A. (Interrupting.) As a flat minimum. There are usually three types of royalty contracts generally. One is a flat rate per Mcf, some are a flat amount so much a year and some of them are based on some kind of a price in the field, weighted average or otherwise and Phillips has renegotiated a lot of its contracts probably from flat prices to weighted average price.

Q. Where have you reached the conclusion that Phillips has renegotiated a lot of its royalty contracts from flat rate to weighted average price, on what basis? A. (Interrupting.) I believe that was the testimony of Mr. Bunn, as I recall it.

• • •

[5733]

MR. SPARKS: I'll change the question to the extent that the leases of Phillips Petroleum Company contain provisions for payment under the provisions shown in Exhibits 108 and 108-A, do you find any flat rate royalty provisions on gas?

• • •

[5735]

THE WITNESS: Well, on Exhibit 108, which apparently was revised in 1943, I don't know whether it goes

BLEED THROUGH

BLURRED COPY

back of that time or not, but paragraph 3, sub B, "royalty on gas, including casing-head gas or other gaseous substances produced from said lands and sold—I don't know whether that is on or at the wells—the royalties shall be 1/8 of the amount realized from such sales". No, wait a minute, I skipped a line.

BY MR. SPARKS:

Q. That is not a flat rate, is it?

MR. McALLISTER: Let the witness answer, if you will, please. You argue on the question, let him answer the question without arguing with him on his answering.

[5736]

THE WITNESS: There is too much fine print. It should be "or used off the premises or used in the manufacture of gasoline or other products, the market value at the well of 1/8 of the gas sold or used provided that on gas sold at the well the royalty shall be 1/8 of the amount realized from such sale" is that what you refer to?

BY MR. SPARKS:

Q. That is the royalty provision, yes. A. No, sir, as I see it, that would not be affected if the Commission were to fix the rates for the sale of gas by Phillips Petroleum Company to Panhandle Eastern at the Sneed plant or at the Hansford plant or to Michigan-Wisconsin at the Sherman plant or to El Paso Natural Gas Company at the Dumas Plant.

Q. My question to you was whether you found any flat rates provided for in that royalty provision? A. No, there is no flat rate in this particular contract.

Q. And you don't know of any contract, royalty contract, that Phillips has that has a flat rate, do you?

MR. McALLISTER: I object, Mr. Examiner. It is arguing with the witness.

PRESIDING EXAMINER: The objection is overruled.

THE WITNESS: At the present time I would have to examine all the royalty contracts to see whether that is a fact.

BY MR. SPARKS:

Q. Then you didn't have any basis for your statement—

[5737]

A. (Interrupting) Well, my basis was the testimony—

Q. (Interrupting) That Phillips had modified a great many of the flat rate contracts to some other basis? A. My basis was listening to the testimony of Mr. Bunn that all of those old contracts had been renegotiated or most of them.

Q. It is a fact, is it not, that unless agreements executed on this form by royalty owners were modified payments to such royalty owners pursuant to the provisions of contracts on this form. Exhibit 109, would be affected in the event of a reduction of the prices Phillips Petroleum Company would be permitted to receive from the sales of gas made to Michigan-Wisconsin Pipe Line Company at the Sherman plant, Panhandle Eastern Pipe Line Company at the Hansford plant and Sneed plant and El Paso Natural Gas Company at the Duman plant?

MR. McALLISTER: I object, Mr. Examiner. The witness has answered the question. Counsel is merely con-

BLEED THROUGH

BLURRED COPY

tinuing to argue with the witness.

MR. TORKELSON: We object to it on the ground it requires the witness to give a legal conclusion and further that the question does not specify the various assumptions on which it is based and is defective in form.

PRESIDING EXAMINER: The objection is overruled.

[5738]

THE WITNESS: The payment under this contract is based on the, other than the minimum, is based on the weighted average price per Mcf received by lessee from all sales of gas delivered within the area comprising Hartley, Sherman and Hansford Counties, Texas, and Texas County, Oklahoma.

BY MR. SPARKS:

Q. And Moore County, Texas. I think you left it out. A. Moore, yes, exceeds four cents during any calendar month. The royalty to the total volume of sweet gas so produced and so sold or used during the succeeding month shall be an amount equal to such weighted average price multiplied by 1/8th of the total volume in Mcf of such sweet gas and the royalty on the total amount of sour gas so produced and so sold or used during each succeeding month shall be an amount equal to such weighted average price less .4466 cents multiplied by 1/8th of the total volume in Mcf of such sour gas. I note from this particular provision which I read that this includes all sales and I assume from that that all sales made by Phillips Petroleum Company to all markets for all purposes in the Moore, Hartley, Sherman and Hansford County, Texas, and Texas County,

Oklahoma during a month are combined in some manner to ascertain a weighted average price, and the royalty payment to those particular royalty

[5739]

owners who have agreements under Exhibit 109 are based on that basis. I don't know whether it is weighted on an Mcf basis, but I assume that is the case.

Q. It is so specified if you search clear through the agreement. Just assume that. You wouldn't weight it on any other basis, would you? A. No, I think that would be a logical basis for weighting, if you were to come to a weighted average price. To whatever weight the sales by Phillips to Michigan-Wisconsin at the Sherman plant, Panhandle at the Hansford plant, Panhandle at the Sneed plant, and El Paso at the Dumas plant bore to the total sales of Phillips in that area the payment which Phillips is obligated to make under the agreement would be affected unless the agreement were modified. Now, to the extent of that modification—I don't mean modification—the extent to which the payment to a royalty owner would be affected by fixing, by the Commission fixing, the sales price, at any one or for any of those sales at a price less than which the gas is being sold at the present time, of course, depends on the weighting and the changes in the price, if any.

* * *

[5741]

Redirect Examination by Mr. McAllister

Q. Mr. Van Scoyoc, on cross-examination by Mr.

BLEED THROUGH

BLURRED COPY

Sparks, reference was made to some 2,300 so-called independent producers, as shown by a report of the Federal Power Commission to a committee of Congress on the percentage of gas which those 2,300 independent producers supplied to purchasers who were natural gas companies, is that right? A. That is right.

Q. Now, I believe that report also shows the 35 largest so-called independent producers? A. It does.

Q. What percentage of the total is supplied by the 35 so-called independent producers? I mean of the total supplied by 2,300 so-called independent producers, what percentage is supplied by the 35 largest independent producers as they are called?

[5746]

A. Approximately 72 per cent.

BY MR. McALLISTER:

Q. And of those 35 so-called independent producers who are the largest, what company stands No. 1 in size? A. Based on the volumes of sales for the seven-state area, in the year 1947, Phillips Petroleum Company is the largest in point of sales to interstate pipe lines.

Q. And on the basis of estimates for '52, which is the largest? A. Phillips Petroleum Company.

Q. Mr. Van Scoyoc, it is a fact, is it not, that El Paso Natural Gas Company gathers and processes casing-head gas in the Permian Basin? A. Yes, sir.

MR. SPARKS: I didn't hear the question.

PRESIDING EXAMINER: Read the question.

MR. McALLISTER: It is a fact that El Paso gathers

and processes casing-head gas in the Permian Basin.

BY MR. McALLISTER:

Q. Could you give us the name of the plants where that processing takes place? A. Processing takes place in Jal No. 1 plant in New Mexico and Jal No. 2 plant in New Mexico.

Q. What is the basis of that information? A. The report of El Paso to the Federal Power Commission

[5747]

and exhibits in this proceeding, 10-A and amendment thereto of 10-B and likewise I believe Exhibit 86, which shows the processing plants in the Permian Basin.

* * *

[5756]

MR. McALLISTER: I ask that there be incorporated in the record by reference to the files of the Commission the testimony of Mr. Don Emery, vice-president and general counsel of Phillips Petroleum Company given in Docket No. G-178 before a proceeding held by the Federal Power Commission in the State of Wisconsin, City of Madison, State Capitol, second floor, on Thursday, October 17, 1940, before Examiner Ewing G. Simpson, and I offer the testimony of Mr. Emery as contained on page 87, beginning at line 13 to and including page 90, line 12; pages 124, line 19 to and including page 128, line 8; page 214, beginning at line 19, to and including page 219, line 17; page 223, line 10, to and including page 224, line 8.

MR. SPARKS: 8?

BLEED THROUGH

BLURRED COPY

MR. McALLISTER: 8. Also the testimony of Stanley Learned—

PRESIDING EXAMINER (interrupting): Well, the testimony of Mr. Emery will be identified for the purposes of this record as

[5757]

Item M by reference.

* * *

MR. McALLISTER: I wanted to be accommodating and I'll be glad to do it. The testimony of Mr. Stanley Learned begins on page 772 at line 2, and the part which I ask be incorporated by reference includes that testimony from the point I have specified to and including line 160 on page 779.

PRESIDING EXAMINER: The testimony of Mr. Stanley Learned will be identified for the purposes of this record as Item N by reference. As I understand it, that is in the same proceeding, is it?

MR. TORKELSON: Who is Mr. Stanley Learned?

MR. McALLISTER: He testified at that time that he was chief engineer of the Phillips Petroleum Company, and that he had charge of all construction work, including natural gas field lines, transmission lines, plants, oil lines, I mean crude oil,

[5758]

and gasoline lines and what-not.

* * *

[5759]

MR. McALLISTER: It is in rebuttal of the proposition that Phillips Petroleum Company never had anything that was called by the name of a transmission line, that they only had gathering lines, as stated by Mr. Bunn, that they never had anything since he was with the company back in 1921, and Mr. Don Emery, testifying before the Federal Power Commission, and I'm going to read one paragraph as better stating what the import of his testimony is than I could possibly state it:

"The construction of gas transmission lines ranging from 15 to 50 miles in length is just ordinary course all the time. I will say that that has occurred and they have been laying and taking up lines of that size for the last 15 years in that department, and then that comprises transmission lines of several kinds. It is not quite correct to describe it just as gathering lines from wells, for instance, referring to Exhibit 7, part 1, there is a 50-mile transmission line just constructed within the last four years from a point in Moore County, Texas, to a point in Hutchinson County, Texas. Well, there are two gas transmission lines extended there and those transmission lines transmit gas after gathering in the field anywhere for a distance of maybe 30 feet to five miles" and those statements of that kind showing what he had to say regarding the lines which Phillips had in the fields in those counties, which is the same fields and counties

[5760]

we have here under consideration with respect to the counties and fields where gas produced is assembled, processed

BLEED THROUGH

BLURRED COPY

and sold to the major pipe lines which we have under consideration. It is documentary evidence in direct contravention of what Mr. Bunn said, and it is offered for that purpose.

Mr. Learned, who is chief engineer—you know, Mr. Don Emery was a lawyer, but he qualifies himself very thoroughly and I have included all his qualifications as he stated them under oath in this proceeding before the Federal Power Commission, but he had with him Mr. Stanley Learned the chief engineer of the company who backed him up, and it is for that reason that the testimony of Mr. Learned is offered. I want to point to one part of that. He says "we have built in excess of 1,100 miles of crude oil pipe lines, ranging generally in size in both 6 and 8 inch, some of it larger, some of it smaller, but the bulk of it in those sizes and we have built in excess of 4,000 miles of gas lines. Do you mean natural gas pipe lines. Natural gas pipe lines, they 'vary in size from 24 and 26-inch down.' This question, 'are they used both for gathering and transmission?' Answer: 'That is right.'"

* * *

[5773]

MR. TORKELSON: Mr. Examiner, the State of Wisconsin and the Public Service Commission of Wisconsin adopt as its exhibits Exhibits marked 3 to 7, inclusive, and we offer them in evidence.

MR. SPARKS: Those have been excluded, have they not? I mean as offered by the staff.

PRESIDING EXAMINER: Yes.

MR. SPARKS: I make the same objections to the exhibits that were made at the time they were offered by the staff.

PRESIDING EXAMINER: The objections to Exhibits 3 to 7, inclusive, are sustained.

MR. TORKELSON: The State of Wisconsin and the Public Service Commission of Wisconsin request that the exhibits stand in the record as and for our offer of proof under the rule.

PRESIDING EXAMINER: They will be so considered.

MR. TORKELSON: The state and the Wisconsin Commission also move that there be incorporated into the record by reference Exhibit 53. I misspoke there. We desire to offer

[5774]

into evidence Exhibit 53 and have incorporated into the record by reference the material already identified as an Item E. The latter is certain testimony of Ralph E. Davis in the matter before the Federal Power Commission in the Michigan-Wisconsin Pipe Line Company and Michigan Consolidated Gas Company, Docket G-1146.

PRESIDING EXAMINER: 1146, is it?

MR. TORKELSON: G-1146.

PRESIDING EXAMINER: 1156, isn't it?

MR. TORKELSON: Is it 56? Then I have the wrong number here.

PRESIDING EXAMINER: I have a note here. My note shows 1156.

MR. TORKELSON: That is right.

BLEED THROUGH

BLURRED COPY

MR. SPARKS: Is this the same—

MR. TORKELSON: Just let me finish. It is the same, yes. The pages from the record in Docket G-1156 which we desire to have incorporated into this record and which already has been identified as Item E in this record appear at Page 3994 of Volume 29 of the record in this instant proceeding. This, again, is material which has been offered by the staff, but we desire to offer it on behalf of the State of Wisconsin and the Public Service Commission of Wisconsin.

MR. SPARKS: Offered and excluded, was it not?

MR. TORKELSON: Yes.

[5775]

MR. SPARKS: Rather than restating my objections, I make the same objections to Exhibits 53 and Item E by reference which were made at the time of the offer by the staff.

PRESIDING EXAMINER: The objection to Exhibit No. 53 as now offered by Wisconsin is sustained.

The objection to Item E by reference as now offered by Wisconsin is also sustained.

MR. TORKELSON: May the record show that we make an offer of proof and request that the document marked as Exhibit 53 stand in the record as and for our offer of proof and that the material incorporated or referred to as Item E be placed in the record as and for our offer of proof?

PRESIDING EXAMINER: Yes, those items will be treated as an offer of proof on behalf of Wisconsin.

MR. TORKELSON: In the past we have, in making objections and making offers of evidence, used the term "we offer" or "we object", and I wish the record to show that whenever that term is used, the term "we" refers both to the State of Wisconsin and the Public Service Commission of Wisconsin.

PRESIDING EXAMINER: Yes, and the record should also show that the ruling with respect to those motions, objections and so forth also is applicable to both of those parties.

MR. TORKELSON: Yes, sir.

[5776]

MR. McALLISTER: It is true, is it not, that during all of this hearing the State of Wisconsin and the Public Service Commission of Wisconsin have been represented by the same counsel?

MR. TORKELSON: That is correct.

MR. SPARKS: What was the question?

PRESIDING EXAMINER: Read the question.

MR. McALLISTER: They were represented by the same counsel, the State of Wisconsin and the Wisconsin Public Service Commission. I mean I merely make that statement to be sure that where "we" was used it was by an individual who was here representing both of them. If I use that term it doesn't mean I am speaking for—

MR. SPARKS (interrupting): I am willing to concede if the counsel uses the word "I", it applies to both of them.

MR. McALLISTER: That is, counsel representing the two parties.

BLEED THROUGH

BLURRED COPY

MR. SPARKS: That is right.

MR. McALLISTER: I am willing to agree to that.

MR. TORKELSON: That is all I have.

* * *

[5788]

PRESIDING EXAMINER:

* * *

The objection to Items M and N are overruled, and those

[5789]

items are received in evidence by reference to the files of the Commission.

* * *

[5795]

MR. McALLISTER: We have one other matter, Mr. Examiner, that you brought up this morning, and that was respect to the matter of the City of Detroit, and I'm only undertaking now to work out some solution because I have been requested to do so by the Examiner.

There is included with the letter of Mr. Lee addressed to the Examiner under date of May 16, 1951, a tabulation which shows the volumes of sales by Michigan Consolidated Gas Company, Detroit District, to the City of Detroit. That statement shows the Mcf as billed in 1950 by some twenty departments of the City of Detroit and the statement only shows sales in Mcf. I don't have such copies, but I would like to have it copied in the record at this time, if you have no objection, Mr. Sparks.

PRESIDING EXAMINER: Is there any objection?
MR. SPARKS: I have no objection.
PRESIDING EXAMINER: That will be done.

MICHIGAN CONSOLIDATED GAS COMPANY

Detroit District

City of Detroit Accounts.

Consumption in MCF as Billed 1950

Department	MCF
Board of Education	21591.6
Fire Department	5822.0

[5796]

Public Library	5335.4
Corporation Counsel	820.7
Police Department	6514.2
Public Works	3379.9
D. S. R.	3206.1
Water Board	1557.4
Parks and Recreation	1088.9
Public Welfare Department	2036.3
Department of Health	3162.5
Election Commission	413.0
Lighting Commission	25.8

BLEED THROUGH
BLURRED COPY

Historical Commission	865.6	
Art Institute	118.1	
Weights and Measures	454.6	
Memorial Hall Commission	5.7	
Hospitals	1230.0	
Safety Engineering	25.1	
Traffic Engineering	731.8	
Total		58,384.7

MR. McALLISTER: Mr. Lee also sent four bills, I presume, to show that the City of Detroit paid its bills, and it shows that—

PRESIDING EXAMINER (interrupting): One of them required some correction, too, didn't it?

[5797]

MR. McALLISTER: I noted that on there. I suppose it was an error in metering, you know. At least, they seem to have adjusted their differences.

[5798]

One bill is a bill paid in April, as near as I can figure out, for the month of March 1951. It is a bill for which it appears that the police department was responsible at their various locations and it totals for that billing period $756.80.

For the same billing period there is one from the water department for $157.22.

For the same billing period there was a payment of $272.63 for the fire commission fund. That is the one that was corrected.

And then there is a third one from the public health, $99.21 for the same billing period.

The total of those bills was $1,286.86.

MR. SPARKS: I didn't hear you state what the billing period was there.

MR. McALLISTER: The March billing period, as near as I can figure it out. They were paid in April but it was apparently for—I don't know the beginning or the end of the billing period, but they were all paid in April 1951, and I am merely assuming that they were for the current period immediately before then.

MR. SPARKS: April 1951?

MR. McALLISTER: Yes.

MR. SPARKS: Then they don't relate at all to the period covered by the letter, then.

MR. McALLISTER: No. At least they paid their bills in 1951 if they didn't in 1950.

I think Mr. Sparks is willing to stipulate that the gas sold

[5799]

and distributed by the Michigan Consolidated in Detroit is supplied in substantial part by Michigan-Wisconsin Pipe Line Company. There are a number of statements here that undertake—

PRESIDING EXAMINER (interrupting): Will counsel stipulate as to that?

BLEED THROUGH

BLURRED COPY

MR. SPARKS: To the statement made by Mr. McAllister, yes.

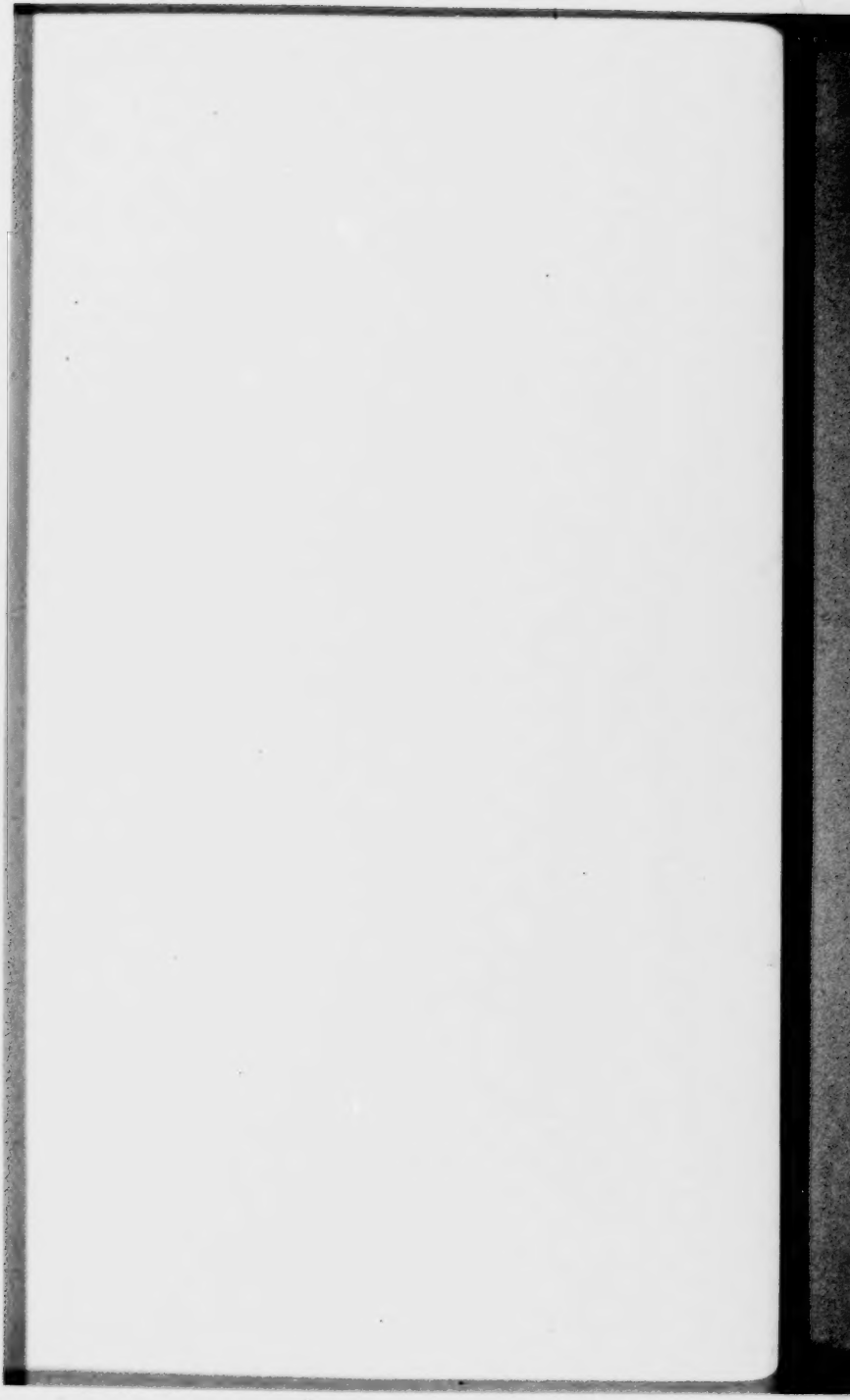
PRESIDING EXAMINER: Yes. That is, that a substantial—

MR. SPARKS (interrupting): I don't see any necessity for going into all the detailed volumetric figures that are included in that statement.

PRESIDING EXAMINER: No, I don't think so either. I think the purpose is to show that the City of Detroit has a substantial interest in the outcome of any rate proceeding.

MR. SPARKS: I don't know how substantial it is, but at any rate it shows they do receive or buy some gas from this distributing company.

• • •



BLEED THROUGH

BLURRED COPY

No. 11282

versus

No. 11283

CITY OF DETROIT, MICHIGAN,

versus

No. 11362

CITY OF KANSAS CITY, MISSOURI,

versus

No. 11365

CITY OF MILWAUKEE, WISCONSIN, a Municipal Corporation,

versus

No. 11366

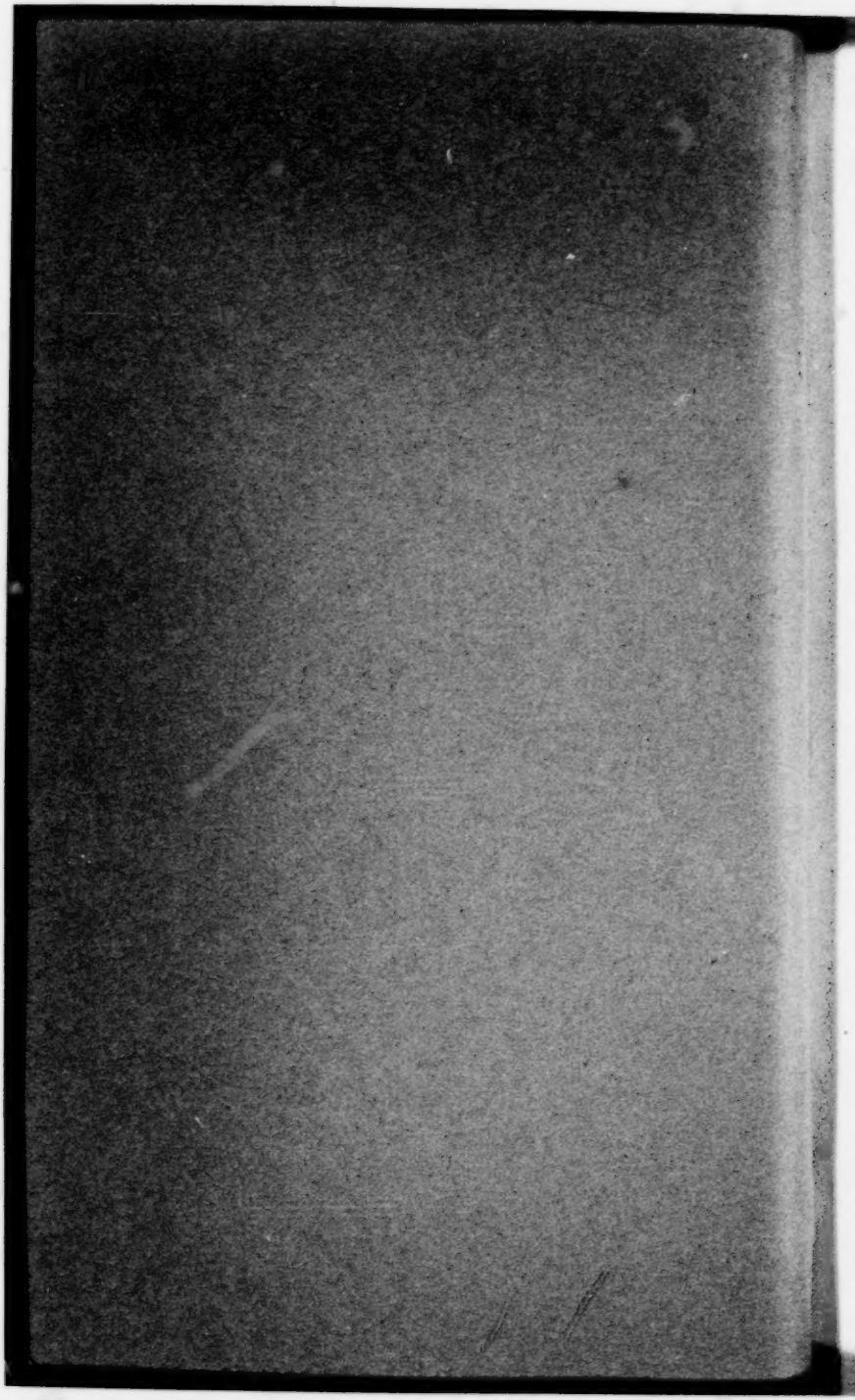
COUNTY OF WAYNE, MICHIGAN,

versus

Review of An Order of the Federal Power Commission

CONTENTS

Exhibits Nos. 1-89



BLEED THROUGH

BLURRED COPY

Volume III

JOINT APPENDIX

BLEED THROUGH

BLURRED COPY

INDEX

VOLUME I

	Record Page	Appendix Page
Joint and Several Petition of State of Wisconsin and Public Service Commission of Wisconsin to Review Orders of the Federal Power Commission in Its Docket G-1148, Filed November 20, 1951		1-33
Petition of City of Milwaukee to Review an Order of the Federal Power Commission in Its Docket No. G-1148 Relating to an Opinion and Order Entered by the Commission on August 16, 1951 (Order No. 217, Issued August 22, 1951), Filed November 15, 1951		34-43
Petition of City of Kansas City, Missouri, for Review of Order of Federal Power Commission, Filed November 14, 1951		44-56
Petition of the City of Detroit, Michigan, for Review of Order of Federal Power Commission, Filed November 14, 1951		57-72
Motion of Phillips Petroleum Company for Leave to Intervene, Filed January 29, 1952		72-77

	Record Page	Appendix Page
Order of United States Court of Appeals for the District of Columbia Circuit permitting Phillips Petroleum Company to Intervene, Dated February 9, 1952, Filed February 9, 1952		78-79
Motion of State of New Mexico, et al. for Leave to Intervene, Filed February 5, 1952		80-84
Order of United States Court of Appeals for the District of Columbia Circuit permitting State of New Mexico and Oil Conservation Commission of State of New Mexico to Intervene, Dated March 3, 1952, Filed March 3, 1952		84-86
Motion of the Corporation Commission of the State of Oklahoma for Leave to Intervene, Filed April 9, 1952		87-96
Answer of State of Wisconsin and Public Service Commission of State of Wisconsin to Motion of the Corporation Commission of the State of Oklahoma for Leave to Intervene, Filed April 16, 1952		96-99
Motion of the State of Texas Through the Railroad Commission of Texas for Leave to Intervene, Filed April 10, 1952		100-106

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
Stipulation With Respect to the Motion to Intervene of the State of Texas Through Its Railroad Commission and the Corporation Commission of the State of Oklahoma and the Motions of the State of Wisconsin and Its Public Service Commission to Dismiss the Aforesaid Motions to Intervene, Filed May 7, 1952		106-111
Order of the United States Court of Appeals for the District of Columbia Circuit Permitting Corporation Commission of State of Oklahoma to Intervene, Dated May 12, 1952, Filed May 12, 1952		111-114
Order of the United States Court of Appeals for the District of Columbia Circuit Permitting the State of Texas Through the Railroad Commission of Texas to Intervene, Dated May 12, 1952, Filed May 12, 1952		114-117
WITNESSES		
Testimony of:		
Marsh, Edward (Presiding Examiner-opening statement)	7-9	118-119
Luttring, Carl E.		
Direct examination by Mr. McAllister	94, 100	119-120
	101-106	120-123
	111-112	124

	Record Page	Appendix Page
Etchieson, W. S.		
Direct examination by Mr. McAllister	150-152	124-126
	170	126
	173	127
	176-178	127-129
	184-186	129
Walters, Mason G.		
Direct examination by Mr. McAllister	225-226	130
	250-252	130-132
	259-261	132-134
Etchieson, W. S. (recalled)		
Direct examination by Mr. McAllister	265	134
	292-302	134-142
	306-311	142-146
	317-319	146-148
	325-326	148
Cross examination by Mr. Sparks	327	148
	338-339	149-150
Adams, Kenneth S.		
Direct examination by Mr. McAllister	370	150
	407-413	150-155
	445-453	156-161
	455-457	161-163
	466-472	163-168
	505-507	168-170

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
Etchieson, W. S.		
Direct examination (resumed) by Mr. McAllister	645-646	170
	657-658	171
	734-737	171-174
Cross examination by Mr. Sparks	744	174
	746-762	174-185
	766-767	185-186
	775-779	186-188
	917-919	188-190
Redirect examination by Mr. McAllister	934	190
	942-943	190
Walters, Mason G. (recalled)		
Direct examination (resumed) by Mr. McAllister	993-1001	191-196
Cross examination by Mr. Sparks	1001	197
Paris, A. W.		
Direct examination by Mr. McAllister	1002-1004	197-198
	1018-1020	198-200
	1034	200
	1045-1046	200-201
	1048-1049	201-202
	1082-1084	202-203
	1094-1095	204-205
	1103-1105	205-206
	1108-1112	206-209
	1116	209-210
	1119-1121	210-212

	Record Page	Appendix Page
Direct examination (resumed) by Mr. Perdue	1122-1124	213-215
	1131-1134	215-217
	1146-1148	217-218
Cross examination by Mr. Sparks	1157-1183	219-237
	1191-1198	238-243
Walters, Mason G. (recalled)		
Further direct examination by Mr. Purdue	1211	244
	1213-1216	244-246
Markley, Howard		
Direct examination by Mr. Purdue	1217-1220	246-248
	1225	248
	1227-1230	249-250
	1232	250-251
	1269-1274	251-255
	1301-1303	256-257
	1311-1315	257-261
	1341	261
	1344-1345	262
Examination by Mr. Torkelson	1372	262
	1379	262-263
Cross examination by Mr. Sparks	1380-1385	263-267
	1395-1396	267-269
	1425-1427	269-270
	1463-1466	270-273
Redirect examination by Mr. McAllister	1473	273
	1486-1488	273-275
	1541-1542	275-276

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
Redirect examination (resumed) by Mr. McAllister	1545	276
	1555-1556	276-278
Examination by Mr. Torkelson	1562-1564	278-279
Examination by Mr. McAllister	1568-1569	279-280
Recross examination by Mr. Sparks	1569	280
Roth, George C.		
Direct examination by Mr. Joffee	1576-1587	281-288
	1590-1593	288-290
Cross examination by Mr. Sparks	1602-1604	291-292
	1657	292-293
Schumacher, A. H.		
Direct examination by Mr. Joffee	1666-1669	293-295
Stewart, Robert Boyd		
Direct examination by Mr. Purdue	1671	295
	1674	295-296
	1680	296
Walters, Mason G. (resumed)		
Redirect examination by Mr. McAllister	1744-1745	296-298
	1786-1787	298
	1789	298-299

	Record Page	Appendix Page
Rippel, A. M.		
Direct examination by Mr. Purdue	1796-1797	299-300
Markley, Howard (resumed)		
Examination by Mr. McAllister	1867	300
	1869-1870	300-301
	1881-1882	301-302
	1898, 1902	302
	1973, 1975	303
Rippel, A. M. (resumed)		
Direct examination by Mr. McAllister	1977-1982	303-306
	1985-1986	307-308
	1990-1993	308-310
	2014	310-311
	2020-2022	311-312
	2024-2026	313-314
	2030-2032	314-315
	2037-2038	315
	2093-2094	315-316
	2097-2098	317
	2103-2104	317-318
Bunn, George P.		
Direct examination by Mr. McAllister	2107-2108	319-320
	2121-2123	320-322
	2132-2134	322-323
	2136-2137	323-324
	2147-2148	324-326
Cross examination by Mr. Sparks	2157-2160	326-329

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
O'Leary, Henry J.		
Direct examination by Mr. Honeck	2166, 2172	329
	2176	329
	2178	329-330
	2181-2185	330-334
Bunn, George P. (resumed)		
Redirect examination by Mr. McAllister	2221	334
	2256-2261	334-339
Recross examination by Mr. Sparks	2271-2272	339
	2284-2285	339-341
	2309	341
	2355-2358	341-343
	2421-2422	343-344
Stark, C. O. (resumed)		
Examination by Mr. Torkelson	2466	344
	2470-2471	344-345
	2726	345
Beall, K. E.		
Direct examination by Mr. Torkelson	2726-2727	345-346
	2729, 2732	346
Examination by Mr. McAllister	2733-2734	346-347
	2737	347-348
	2742, 2747	348
	2752	348
	2759-2760	349
	2812	349-350

	Record Page	Appendix Page
Bunn, George P. (resumed)		
Direct examination by Mr. Sparks	2813	350
	2819	350
	2923-2926	350-353
	2935	353
	2939-2940	353-354
	2949-2950	354-355
	2999-3000	355
	3049-3052	355-356
	3055-3058	356-359
	3094-3096	359-361
	3109-3111	361-363
	3140-3141	363
	3146-3147	363-364
	3208	364
	3257-3268	364-374

BLEED THROUGH

BLURRED COPY

INDEX

VOLUME II

WITNESSES

	Record Page	Appendix Page
Testimony of:		
Baumel, Jack K.		
Direct examination by		
Mr. Crenshaw	3502-3504	375-376
	3569-3572	376-379
	3576-3580	379-383
Murray, W. J. Jr.		
Direct examination by		
Mr. Crenshaw	3591-3612	383-401
	3617-3623	401-405
Examination by Mr. McAllister	3628-3634	405-409
Examination by Mr. Crenshaw	3637-3641	410-413
	3646-3651	414-419
Examination by Mr. Sparks	3656-3671	419-431
	3673-3677	431-435
	3683-3686	435-438
	3687-3692	438-443
	3696-3702	443-448
	3704-3705	448-449
Examination by Mr. Crenshaw	3717-3718	449-450
	3720-3721	450-451
	3723-3724	452-453
Examination by Mr. Sparks	3724-3740	453-465
	3742-3745	466-468
	3747-3759	468-476

	Record Page	Appendix Page
Cross examination by Mr. McAllister	3762-3773	477-485
	3777-3779	485-487
	3781-3782	487-488
	3785-3786	488-490
	3791-3793	490-492
	3798-3800	492-494
	3822-3823	494
	3835-3840	494-498
	3854-3859	498-502
	3861-3869	502-509
	3872-3873	509-510
Baumel, Jack K. (resumed)		
Direct examination by Mr. Crenshaw	3919	510
	3933-3935	510-512
	3939-3941	512-513
	3948-3958	513-519
	3973-3974	519-520
Spurrier, Richard R.		
Direct examination by Mr. Chumbris	4018-4019	521-522
	4021	522
	4051-4066	522-535
	4071	535
	4073-4077	535-539
Cross examination by Mr. Perdue	4078	539
	4085-4086	539-540
	4088-4092	541-543
	4097-4100	544-546
	4103-4106	546-549
	4110-4111	549-550
	4113-4117	550-552

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
	4122-4123	552-553
	4125-4127	553-555
	4129-4130	555-556
	4132-4134	556-557
Baumel, Jack K. (resumed)	4144	557
Cross examination by Mr. McAllister	4178-4192	558-570
	4228-4234	570-575
	4241-4242	575-576
	4244-4256	576-587
	4260-4264	587-591
	4277	591
	4286	591-592
Smiley, T. E.		
Direct examination by Mr. Sparks	4314	592
	4331-4341	592-602
Capshaw, Elmer		
Direct examination by Mr. Green	4484-4487	602-604
	4518-4520	604-605
	4524-4526	605-606
	4529-4530	606-607
Jones, Ray C.		
Direct examination by Mr. Green	4531-4533	607-609
	4535-4537	609-611
	4539-4540	611-612

	Record Page	Appendix Page
Capshaw, Elmer (resumed)		
Cross examination by Mr. McAllister	4676	612
	4712-4714	612-614
	4716-4718	614-615
	4720	615-616
	4723-4724	616-617
Jones, Ray C. (resumed)		
Cross examination by Mr. McAllister	4763	617
	4765-4766	618-619
	4770-4771	619
Walters, Mason (resumed)		
Direct examination by Mr. Perdue	4776	620
	4780-4782	620-621
Bunn, George P. (resumed)		
Cross examination by Mr. McAllister	4783	621
	4805-4808	621-624
	4872	624
	4874-4876	624-625
	4909	626
	4911-4914	626-627
	4936-4937	627-628
	4943-4944	628-629
	5022-5023	629
Examination by Mr. Joffee	5078-5080	630-631
	5082-5083	631-632
	5085	632
	5097-5098	632-634

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
	5115-5116	634-635
	5119-5122	635-637
	5127	638
	5133-5136	638-640
	5211-5214	640-643
Redirect examination by Mr. Sparks	5268-5284	643-656
	5288-5291	656-660
	5296-5300	660-663
	5311-5323	663-672
	5403-5404	672-673
	5420-5423	673-676
	5445-5447	676-678
	5485-5487	678-679
	5519	679-680
Stockwell, B. P.		
Direct examination by Mr. McAllister	5528-5529	680
	5534-5546	680-689
Stevens, Harry P.		
Direct examination by Mr. McAllister	5546-5547	689
	5550	689-690
	5552	690
	5560-5563	690-692
Van Scoyoc, Melwood W.		
Direct examination by Mr. McAllister	5567	693
	5570-5571	693-694
	5583-5587	694-698
	5611-5613	698-699

	Record Page	Appendix Page
Cross examination by Mr. Sparks	5614-5616	699-700
	5623-5625	701-702
	5649-5663	702-715
Stevens, Harry F. (resumed)		
Cross examination by Mr. Sparks	5670-5684	715-725
Van Scoyoc, Melwood W. (resumed)		
Cross examination by Mr. Sparks	5691-5693	725-728
	5697-5698	728-729
	5709-5711	729-731
	5726-5727	731-732
	5730-5733	732-734
	5735-5739	734-738
Redirect examination by Mr. McAllister	5741	738-730
	5746-4747	739-740
	5756-5760	740-743
	5773-5776	743-747
	5788-5789	747
	5795-5799	747-751

BLEED THROUGH

BLURRED COPY

INDEX

VOLUME III

EXHIBITS

	Record Page	Appendix Page
Exhibit 1—Map of Interstate Gas Pipeline Systems supplied by Phillips Petroleum Company; also Tabulation showing principal cities and gas distributing utilities supplied by said systems (excluding map which is superseded by Exhibit 1A)	6226-6228	753-754
Exhibit 1-A—Map bearing legend "Certain Interstate Gas Pipeline Systems Supplied by Phillips Petroleum Company	6229	754-755
Exhibit 2—Diagram of pipeline facilities used to supply natural gas to El Paso Natural Gas Company at Dumas Plant, Northern Natural Gas Company and Independent Natural Gas Company at Gray Plant and Skellytown, Panhandle Eastern Pipe Line Company at Sneed and Hansford Plants, Michigan Wisconsin Pipe Line Company at Sherman Plant	6232	756-757
Exhibit 3—Tabulation entitled "Phillips Petroleum Company and Subsidiary Companies—Consolidated Balance Sheets—Per Books—De-		

	Record Page	Appendix Page
cember 31, 1938 to 1949 and September 30, 19540." Rejected, not received in evidence	6233-6234	758-759
Exhibit 4—Tabulation entitled "Phillips Petroleum Company and Subsidiary Companies—Consolidated Income Account — per books — Years Ended December 31, 1938 to September 30, 1950." Rejected, not received in evidence	6235	760-761
Exhibit 5—Phillips Petroleum Company and Subsidiary Companies—Gas Operations—Condensed Income Account—per books—Years Ended December 31, 1938 to 1949 and Nine Months Ended September 30, 1950. Rejected, not received in evidence	6236-6237	762-763
Exhibit 6—Phillips Petroleum Gas Company residue gas income statement per books—Year Ended December 31, 1949 and Phillips Petroleum Company and Subsidiary Companies—Gas Operations—Consolidated Income Account—Year to Date—December 31, 1949. Rejected, not received in evidence	6238-6240	764-765
Exhibit 7—Document entitled "Phillips Petroleum Company and 14 Subsidiaries—Excess Earnings and Tax Savings—Natural Gas Department—Year Ended December 31,		

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
1950. Rejected, not received in evidence	6241-6244	766-767
Exhibit 9-A—Contract dated April 5, 1943 between Phillips Petroleum Company and Panhandle Eastern Pipe Line Company	6355-6368	768-769
Exhibit 9-B—Supplemental contract between Phillips Petroleum Company and Panhandle Eastern Pipe Line Company, dated April 5, 1943	6376-6383	770-772
Exhibit 9-C—Processing contract entered into on May 25, 1943 between Panhandle Eastern Pipe Line Company and Phillips Petroleum Company	6404-6408	773-778
Exhibit 10-K—Gas contract dated October 13, 1945 covering the purchase and sale of gas from the Permian Basin in Dumas area	6532-6553	778-784
Exhibit 10-W—Contract of January 1, 1948 covering the purchase and sale of additional volumes of gas in the Permian Basin area, over and above those stipulated in the October 13, 1945 contract, as amended	6613-6626	785-795
Exhibit 10-BB—Contract dated November 4, 1948 between Phillips Petroleum Company and El Paso Natural Gas Company providing for the sale of gas by Phillips from Gold-		

	Record Page	Appendix Page
smith Plant for redelivery by El Paso to Sid Richardson Carbon Company	6653-6661	796-801
Exhibit 10-DD—Contract dated August 31, 1948 covering the sale and purchase of gas from Crane Plant	6678-6686	801-803
Exhibit 11-A—Gas contract between Michigan-Wisconsin Pipe Line Company and Phillips Petroleum Company, dated December 11, 1945	6842-6859	803-809
Exhibit 12-A—Revision of Exhibit 12—Diagram of pipe line facilities used to supply natural gas to Michigan Wisconsin Pipe Line Company at Sherman Plant, Texas	7175	810-811
Exhibit 13-A—Revision of Exhibit 13—Diagram of pipe line facilities used to supply natural gas to Panhandle Eastern Pipe Line Company at Hansford Plant, Texas	7177	812-813
Exhibit 14-A—Diagram of certain pipe lines and facilities in and around Phillips Petroleum Company's Sneed Plant	7179	814-815
Exhibit 14-B—Revision of Exhibit 14—Diagram of pipe line facilities used to supply natural gas to Panhandle Eastern Pipe Line Company at Sneed Plant, Texas, and to El Paso		

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
Natural Gas Company at Dumas Plant, Texas	7180	816-817
Exhibit 15-A—Revision of Exhibit 15—Diagram of pipe line facilities used to supply natural gas to Independent Natural Gas Company and Northern Natural Gas Company	7182	818-819
Exhibit 18—Copy of letter dated March 14, 1947 from A. M. Rippel to Mr. Geo. P. Bunn, and attachments thereto	7189-7195	820-831
Exhibit 19—Letter dated February 2, 1946 from Roy M. Teel to Mr. A. M. Rippel (not including attachments). Rejected, not received in evidence	7196-7198	831-836
Exhibit 20—Letter dated August 20, 1948 from Allen B. Hiatt to Mr. Leroy Culbertson (not including attachments). Rejected, not received in evidence	7206-7207	837-840
Exhibit 21—Minutes of adjourned regular meeting of Board of Directors of Phillips Petroleum Company, September 27, 1948. Rejected, not received in evidence	7216-7218	840-842
Exhibit 28—Prospectus 1,007,517 shares of Phillips Petroleum Company common stock (no par value)	7266-7275	842-849

	Record Page	Appendix Page
Exhibit 29—Excerpts from prospectus relating to $75,644,900 Phillips Petroleum Company 2-3/9% debentures due 1975	7277-7287	849-871
Exhibit 45-A—Diagrammatic sketch bearing legend "Phillips Petroleum Company—Bartlesville, Oklahoma—Flow Sheet—Sherman & Hansford Plant Gas System"	7339	872-873
Exhibit 45-B—Diagrammatic sketch bearing legend "Phillips Petroleum Company—Bartlesville, Oklahoma—Flow Sheet—Sneed Plant Gas System"	7340	874-875
Exhibit 45-C—Diagrammatic sketch bearing legend "Phillips Petroleum Company — Diagrammatic Layout of Plant Piping at Gray Plant"	7341	876-877
Exhibit 45-D—Diagrammatic sketch bearing legend "Phillips Petroleum Company—Bartlesville, Oklahoma—Flow Sheet—Dumas Plant Gas System"	7342	878-879
Exhibit 45-E—Diagrammatic sketch bearing legend "Phillips Petroleum Company — Diagrammatic Layout of Plant Piping at Eunice Plant"	7343	880-881

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
Exhibit 45(E)-1—Diagrammatic sketch bearing legend "Bartlesville, Oklahoma—Flow Sheet—Eunice Plant Gas System	7344	882-883
Exhibit 45-F—Diagrammatic sketch bearing legend "Phillips Petroleum Company—Diagrammatic Layout of Plant Piping at Fullerton Plant Area"	7345	884-885
Exhibit 45(F)-1—Diagrammatic sketch bearing legend "Phillips Petroleum Company—Bartlesville, Oklahoma, Flow Sheet—Fullerton Plant Gas System"	7346	886-887
Exhibit 45-G—Diagrammatic sketch bearing legend "Phillips Petroleum Company—Diagrammatic Layout of Plant Piping at Goldsmith Plant"	7347	888-889
Exhibit 45(G)-1—Diagrammatic sketch bearing legend "Phillips Petroleum Company, Bartlesville, Oklahoma —Flow Sheet—Goldsmith Plant Gas System"	7348	890-891
Exhibit 45-H—Diagrammatic sketch bearing legend "Phillips Petroleum Company—Diagrammatic Layout of Plant Piping at Crane Plant Area"	7349	892-893

	Record Page	Appendix Page
Exhibit 45(H)-1—Diagrammatic sketch bearing legend "Phillips Petroleum Company—Bartlesville, Oklahoma —Flow Sheet—Crane Plant Gas System"	7350	894-895
Exhibit 48—Sketch bearing legend "Diagram of Pipe Line Facilities Used to Supply Natural Gas to El Paso Natural Gas Company at Eunice Plant, New Mexico"	7355	896-897
Exhibit 49—Sketch bearing legend "Diagram of Pipe Line Facilities Used to Supply Natural Gas to El Paso Natural Gas Company at Fullerton Plant, Texas (Andrews County)"	7356	898-899
Exhibit 50—Sketch bearing legend "Diagram of Pipe Line Facilities Used to Supply Natural Gas to El Paso Natural Gas Company at Goldsmith Plant, Texas"	7357	900-901
Exhibit 51—Sketch bearing legend "Diagram of Pipe Line Facilities Used to Supply Natural Gas to El Paso Natural Gas Company at Crane Plant, Texas (Crane County)"	7358	902-903
Exhibit 52—Agreement of July 5, 1945 between Phillips Petroleum Company and Continental Oil Company and Cities Service Gas Company		

BLEED THROUGH

BLURRED COPY

	Record Page	Appendix Page
for sale and purchase of casinghead gas from Edmond Gasoline Plant	7404, 7407	904
Plan of unitization of West Edmond Hunton Lime Unit, covering lands in Oklahoma, Canadian, King Fisher, and Logan Counties, Oklahoma	7427-7468	905-974
Exhibit B attached to plan—table of percentage participation in the unit	7470-7485	975-993
Exhibit C attached to plan — accounting procedure	7486-7491	994-1001
Exhibit D attached to plan—processing and compression of gas definitions	7492-7498	1002-1012
Residue gas agreement	7526-7534	1012-1024
Letter of October 1, 1947 from Sohio Petroleum Company to Phillips Petroleum Company (as Operator of the Edmond Gasoline Plant and as Operator of The Hunton Gasoline Plant)	7545-7547	1025-1030
Agreement for amendment of Exhibit D Plan of Unitization, West Edmond Hunton Lime Unit, dated March 15, 1949	7621-7635	1030-1047
Gas purchase contract dated September 12, 1949 between Cities		

	Record Page	Appendix Page
Service Gas Company and Phillips Petroleum Company	7691-7694	1048-1051
Exhibit 53—"Notegram" dated July 7, 1948 from R. B. Stewart to Allen B. Hiatt. Rejected, not received in evidence	7798-7799	1051-1052
Exhibit 54—Tabulations Phillips Petroleum Company—Outside Sales of Natural Gas—Year 1950	7802-7817	1053-1068
Exhibit 55—Tabulations Phillips Petroleum Company—Outside Sales of Natural Gas—Year 1949	7821-7832	1069-1081
Exhibit 58—Tabulation entitled "Phillips Petroleum Company—Panhandle & Hugoton Field Gasoline Plants"	7836	1082-1083
Exhibit 59—Tabulation entitled "Phillips Petroleum Company—Western District—Gasoline Plants"	7837	1084-1085

BLEED THROUGH

BLURRED COPY

VOLUME III JOINT APPENDIX

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 11247

STATE OF WISCONSIN AND PUBLIC SERVICE COMMISSION OF WISCONSIN, Petitioners

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

No. 11241

CITY OF DETROIT, MICHIGAN, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

No. 11242

CITY OF KANSAS CITY, MISSOURI, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

No. 11245

CITY OF MILWAUKEE, WISCONSIN, a Municipal Corporation, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

No. 11252

COUNTY OF WAYNE, MICHIGAN, Petitioner,

versus

FEDERAL POWER COMMISSION, Respondent
PHILLIPS PETROLEUM COMPANY ET AL., Intervenors.

Review of An Order of the Federal Power Commission

CONTENTS

Exhibits Nos. 1-59

BLEED THROUGH

BLURRED COPY

[6226]

Exhibit No. 1

[Note: Title page, cover and map omitted]

PRINCIPAL CITIES AND GAS DISTRIBUTING UTILITIES SUPPLIED BY INTERSTATE PIPE LINE SYSTEMS SHOWN ON ATTACHED MAP

El Paso Natural Gas Company System

City	Gas Distributing Utility
Berkeley, California	Pacific Gas and Electric Company
El Paso, Texas	El Paso Natural Gas Company
Fresno, California	Pacific Gas and Electric Company
Glendale, California	Southern California Gas Company
Los Angeles, California	Southern California Gas Company and Southern Counties Gas Company of California
Oakland, California	Pacific Gas and Electric Company
Pasadena, California	Southern California Gas Company
Phoenix, Arizona	Central Arizona Light and Power Company
San Bernardino, California	Southern California Gas Company
San Diego, California	San Diego Gas and Electric Company
San Francisco, California	Pacific Gas and Electric Company
Tucson, Arizona	Tucson Gas, Electric Light and Power Company, The

[6227]

Michigan Wisconsin Pipe Line Company System

City	Gas Distributing Utility
Detroit, Michigan	Michigan Consolidated Gas Company
Grand Rapids, Michigan	Michigan Consolidated Gas Company
Green Bay, Wisconsin	Wisconsin Public Service Company
Madison, Wisconsin	Madison Gas and Electric Company
Milwaukee, Wisconsin	Milwaukee Gas Light Company
Muskegon, Michigan	Michigan Consolidated Gas Company
Racine, Wisconsin	Wisconsin Gas and Electric Company

Northern Natural Gas Company

City	Gas Distributing Utility
Council Bluffs, Iowa	Council Bluffs Gas Company
Des Moines, Iowa	Iowa Power and Light Company
Lincoln, Nebraska	Central Electric and Gas Company
Mason City, Iowa	Peoples' Gas and Electric Company
Minneapolis, Minnesota	Minneapolis Gas Light Company
Omaha, Nebraska	Omaha Metropolitan Utilities District
St. Paul, Minnesota	Northern States Power Company
Sioux City, Iowa	Sioux City Gas and Electric Company

[6228]

Panhandle Eastern Pipe Line Company System

City	Gas Distributing Utility
Akron, Ohio	East Ohio Gas Company, The
Anderson, Indiana	Central Indiana Gas Company
Battle Creek, Michigan	Battle Creek Gas Company
Bay City, Michigan	Consumers Power Company
Cleveland, Ohio	East Ohio Gas Company, The
Dearborn, Michigan	Michigan Consolidated Gas Company
Decatur, Illinois	Illinois Power Company
Detroit, Michigan	Michigan Consolidated Gas Company
Flint, Michigan	Consumers Power Company
Fort Wayne, Indiana	Northern Indiana Public Service Co.
Hamtramck, Michigan	Michigan Consolidated Gas Company
Highland Park, Michigan	Michigan Consolidated Gas Company
Jackson, Michigan	Consumers Power Company
Kalamazoo, Michigan	Consumers Power Company
Lansing, Michigan	Consumers Power Company
Muncie, Indiana	Central Indiana Gas Company
Peoria, Illinois	Central Illinois Light Company
Pontiac, Michigan	Consumers Power Company
Quincy, Illinois	Central Illinois Public Service Co.
Saginaw, Michigan	Consumers Power Company
Terre Haute, Indiana	Terre Haute Gas Corporation (through Indiana Gas and Chemical Company)
Toledo, Ohio	Ohio Fuel Gas Company, The

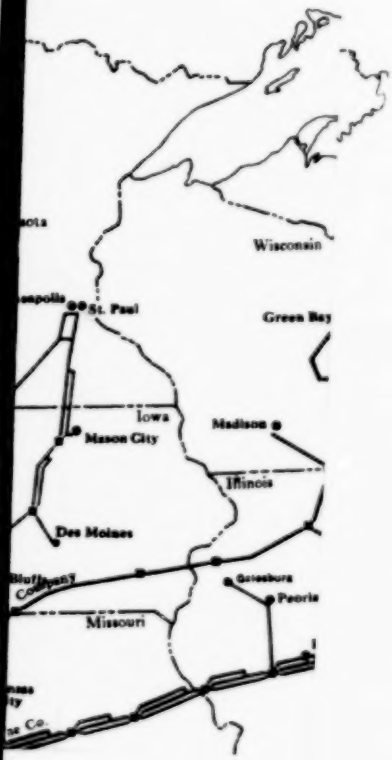
[6229]

Exhibit No. 1-A

Map bearing legend "Certain Interstate Gas Pipeline Systems Supplied by Phillips Petroleum Company."

BLEED THROUGH

BLURRED COPY



FOLD OUT TO LARGE TO BE FILMED

[6232]

Exhibit No. 2

[*Note: Cover and title page omitted*]

Diagram of pipeline facilities used to supply natural gas to El Paso Natural Gas Company at Dumas Plant, Northern Natural Gas Company and Independent Natural Gas Company at Gray Plant and Skellytown, Panhandle Eastern Pipe Line Company at Sneed and Hansford Plants, Michigan Wisconsin Pipe Line Company at Sherman Plant.

BLEED THROUGH

BLURRED COPY

DIAGRAM
OF
PIPE LINE FACILITIES USED TO SUPPLY NATURAL GAS
TO
EL PASO NATURAL GAS COMPANY AT DUMAS PLANT
NORTHERN NATURAL GAS COMPANY AND INDEPENDENT NATURAL GAS COMPANY AT GRAY PLANT AND SKELLYTOWN
PANHANDLE EASTERN PIPE LINE COMPANY AT SNEED PLANT AND AT HANSFORD PLANT
MICHIGAN WISCONSIN PIPE LINE COMPANY AT SHERMAN PLA

FOLD OUT TO LARGE TO BE FILMED

[6233]

[6234]

Exhibit No. 3

[*Note: This exhibit was rejected by the Examiner at record 5519 and not received in evidence. An offer of proof was made on page 5763 of the record by the State of Wisconsin and the Public Service Commission of Wisconsin.*]

PHILLIPS PETROLEUM COMPANY AND SUBSIDIARY COMPANIES CONSOLIDATED BALANCE SHEETS PER BOOKS DECEMBER 31, 1938 TO 1950

BLEED THROUGH

BLURRED COPY

1945	1946	1947	1948	1949	1950
27,390,203.79	$ 26,138,193.08	$ 38,559,001.87	$ 29,017,921.53	$ 51,587,326.35	$ 50,029,58
2,417,729.52	385,049.66	3,336,413.50	789,179.10	1,450,317.09	12,534,01
15,838,358.21	18,365,899.00	29,175,010.72	43,195,968.91	38,188,561.88	48,009,10
17,899,219.13	21,499,320.80	30,062,756.29	52,688,363.78	46,576,998.82	48,251,31
9,058,352.90	11,125,399.27	15,099,806.40	25,657,275.08	17,891,026.51	18,054,74
6,979,928.74	3,333,131.68	3,100,928.05	9,545,589.07	4,937,846.66	4,957,27
11,679,237.41	11,205,845.21	23,005,656.31	14,547,513.57	11,915,299.63	12,023,68
31,720,347.86	34,151,268.09	37,407,627.95	44,263,491.20	45,026,146.92	60,130,66
11,492,394.90	12,111,981.78	12,310,459.46	13,848,954.59	14,904,072.85	16,301,89
20,227,952.96	22,039,286.31	25,097,168.49	30,414,536.61	30,122,074.07	43,828,76
463,885,144.83	484,392,921.92	556,609,069.75	671,870,288.01	726,079,053.51	775,637,84
261,414,451.56	269,872,121.57	290,312,976.09	310,190,580.78	326,262,729.37	353,707,66
202,470,693.27	214,520,800.35	266,296,093.66	361,679,707.23	399,816,324.14	421,930,17
222,698,646.23	236,560,086.66	291,393,262.15	392,091,243.84	429,938,398.21	465,758,94
			491,858.68		
			2,984,246.89		
222,698,646.23	236,560,086.66	291,393,262.15	395,573,349.41	429,938,398.21	465,758,945
3,059,886.37	3,446,214.44	5,556,475.96	8,258,368.09	4,742,731.93	7,612,88
317,021,562.30	$332,059,139.80	$439,289,341.25	$579,273,528.54	$607,228,507.08	$667,231,55

FOLD OUT TO LARGE TO BE FILMED

[6235]

Exhibit No. 4

[Note: This exhibit was rejected by the Examiner at record 5519 and not received in evidence. An offer of proof was made on page 5763 of the record by the State of Wisconsin and the Public Service Commission of Wisconsin.]

BLEED THROUGH

BLURRED COPY

1945	1946	1947	1948	1949	1950
212,458,510.60	$220,074,897.64	$298,309,750.89	$487,165,286.96	$486,442,214.70	$532,957,618
15,409,825.75	1,798,375.25	4,462,299.57	6,558,724.43	3,405,396.84	1,105,935
227,868,336.35	221,873,272.89	302,772,050.46	493,724,011.39	489,847,611.54	534,063,553
73,958,538.27	83,625,473.75	111,830,229.27	219,394,934.02	239,514,180.52	256,372,768
65,491,050.48	70,560,298.49	85,937,693.35	120,351,501.41	129,971,284.55	132,208,968
5,531,755.16	5,169,211.48	7,239,769.20	10,591,186.59	10,421,980.19	11,795,227
6,234,801.53	1,382,303.18	5,596,144.75	819,917.24	.....	.....
351,219,145.44	160,737,286.90	210,603,836.57	351,157,539.26	379,907,445.26	400,376,963
76,649,190.91	61,135,985.99	92,168,213.89	142,566,472.13	109,940,166.28	133,686,590
1,549,736.03	1,307,214.10	1,550,510.17	1,851,198.38	3,077,766.89	3,463,153
75,099,454.88	59,828,771.89	90,617,703.72	140,715,273.75	106,862,399.39	130,223,437
15,254,607.24	11,983,740.45	12,686,876.52	15,928,879.16	19,160,965.73	22,568,651
3,829,508.07	3,142,113.27	3,689,537.98	4,660,365.49	4,846,821.95	5,017,465
9,277,942.63	7,929,674.12	8,952,563.34	9,565,133.85	11,703,407.81	10,401,747
4,336,475.87	474,848.30	986,193.40	949,282.84	1,152,045.44	3,304,891
10,403,887.74	5,149,712.32	4,929,349.78	8,885,564.15	6,233,424.52	7,115,881
4,314,424.16	2,262,432.82	3,396,639.87	6,318,207.10	4,630,328.95	4,066,238
47,416,845.71	30,942,521.28	34,641,460.89	46,307,432.59	47,726,994.40	52,474,873
27,682,609.17	28,886,250.61	55,976,242.83	94,407,841.16	59,135,404.99	77,748,564
5,111,100.00	6,761,100.00	15,163,600.00	23,026,843.74	16,039,218.62	26,191,300
.....	500,000.00	82,145.53	1,250,000.00	1,418,184.44	.....
5,111,100.00	6,261,000.00	15,081,454.47	21,776,843.74	14,621,034.18	26,191,300
		1,141.32	.....	.....	
22,571,509.17	$ 22,625,150.61	$ 40,893,647.04	$ 72,630,997.42	$ 44,514,370.81	$ 51,557,264
4,916,987	4,916,987	5,044,053	6,045,530	6,047,527	6,060,926
4.5905	4.6014	8.1073	12.0140	7.3608	8.5065
9,833,974.00	9,833,974.00	12,466,634.75	18,136,610.25	18,142,619.25	21,217,157
$2.00	$2.00	$2.50	$3.00	$3.00	$3.50

FOLD OUT TO LARGE TO BE FILMED

[6236]

[6237]

Exhibit No. 5

[*Note: This exhibit was rejected by the Examiner at record 5519 and was not received in evidence. An offer of proof was made on page 5763 of the record by the State of Wisconsin and the Public Service Commission of Wisconsin.*]

PHILLIPS PETROLEUM COMPANY AND SUBSIDIARY COMPANIES
GAS OPERATIONS
CONDENSED INCOME ACCOUNT — PER BOOKS

Years Ended December 31, 1938 to 1950

BLEED THROUGH

BLURRED COPY

	1946	1947	1948	1949	1950
GROSS OPERATIN					
Lease Productio	553,289.26	$ 616,765.04	$ 860,605.70	$ 896,403.31	$ 1,093,070
Lease Productio	5,937,249.32	6,751,012.72	6,348,066.86	6,326,082.14	13,166,187
Distributing Syst	89,269.94	97,341.62	727,767.71	1,890,213.62	2,632,631
Distributing Syst	41,807.89	14,274.51	13,951.96	606,213.77	858,312
Pipe Line Incon	214,926.77	236,855.22	243,879.35	843,608.02	410,994
Pipe Line Incon	3,316.00	4,826.50	195,280.31	373,956.76	488,298
Grayco Booster	651,801.08	641,490.29			
Residue Sales—o	8,082,462.47	11,019,313.64	14,361,315.29	15,429,486.17	20,274,484
Residue Sales—i	1,490,301.68	1,646,471.88	2,396,924.01	2,552,944.24	4,336,261
Carbon Black Sa	728,496.39	70,529.21			
Other Income	19,204.54	27,368.86	44,210.69	46,886.20	2,764,328
	17,812,125.34	21,126,249.49	25,192,031.88	28,965,794.23	46,024,569
Less: Intradepar	6,401,048.14	7,254,976.22	6,794,668.30	6,972,487.30	15,326,689
	1,411,077.20	13,871,273.27	18,397,363.58	21,993,306.93	30,697,879
COSTS, OPERATIN					
Distributing Syst	57,997.35	62,314.69	53,791.40	1,419,807.31	1,664,045
Distributing Syst	27,614.92	22,267.12	.....	933,089.41	1,669,014
Pipe Line Purch	5,056.77	12,096.52	154,747.70	302,366.97	376,249
Pipe Line Purch	72,116.21	78,068.41	78,034.36	369,083.12	138,261
Grayco Booster	309,472.09	304,631.68	340,503.77	.....	
Residue Purchas	2,130,732.30	2,664,184.05	3,415,993.47	4,529,668.16	7,490,675
Residue Purchas	5,782,911.63	7,996,897.17	7,530,471.05	7,216,455.93	15,692,235
Cost of Carbon	600,803.26	62,438.86	.....		
Operating Expe	732,638.72	790,391.02	1,075,296.01	1,032,962.37	1,271,651
Inventory Adjus					
Undeveloped lea	383,591.10	373,209.59	339,573.03	378,693.57	352,537
Sales Expense					
General Expens	744,076.20	636,752.61	1,032,901.91	801,725.80	767,753
Geological, Geop	525,536.36	613,565.73	820,771.78	681,180.59	1,831,058
Taxes (Ad Valor	336,880.71	594,919.18	594,804.54	699,868.78	1,171,059
	11,709,427.62	14,211,736.63	15,436,889.02	18,364,902.01	32,424,540
Less: Intradepar	6,401,048.14	7,254,976.22	6,794,668.30	6,972,487.30	15,326,689
	5,308,379.48	6,956,760.41	8,642,220.72	11,392,414.71	17,097,851
PROFIT FROM SA	6,102,697.72	6,914,512.86	9,755,142.86	10,600,892.22	13,600,028
	(324.14)	93,373.44	2,980.85	18,860.34	3,336
	6,102,373.58	7,007,886.30	9,758,123.71	10,619,752.56	13,603,364
INDIRECT CHARG					
Overhead					
Taxes (State Inc	605,654.77	768,026.58	857,660.57	839,500.50	1,120,829
Taxes (Social Se	6,200.00	8,026.00	13,609.00	12,285.65	27,085
Taxes (State Inc	14,357.57	17,526.52	14,478.00	15,604.96	18,694
	626,212.34	793,579.10	885,747.57	867,391.11	1,166,608
Income before F	5,476,161.24	$ 6,214,307.20	$ 8,872,376.14	$ 9,752,361.45	$12,436,756

FOLD OUT TO LARGE TO BE FILMED

[6238]

[6239]

[6240]

Exhibit No. 6

[*Note: This exhibit was rejected by the Examiner at record 5519 and not received in evidence. An offer of proof was made on page 5763 of the record by the State of Wisconsin and the Public Service Commission of Wisconsin.*]

PHILLIPS PETROLEUM COMPANY AND SUBSIDIARY COMPANIES

GAS OPERATIONS
CONSOLIDATED INCOME ACCOUNT

YEAR TO DATE — DECEMBER 31, 1949

BLEED THROUGH

BLURRED COPY

	NG SYSTEM		
	Co. ction ment	I. N. G. Co. & Phillips Natural Gas Co.	Residue
GROSS OPERATING INCOME			
Sales—outside	213.62	$ 843,608.02	$15,429,486.17
Sales—inside	213.77	373,956.76	2,552,944.24
Other income	.....	3,504.57	.....
	127.39	1,221,069.35	17,982,430.41
COSTS, OPERATING AND GE			
Purchases—outside	307.31	302,366.97	4,529,668.16
Purchases—inside	089.41	369,083.12	7,216,455.93
Operating expenses	545.84	277,912.17	539,333.37
Undeveloped leases rental ex	.....	.....	.....
Geological, Geophysical and	.....	.....	.....
General expense	375.43	(2,555.40)	577,654.76
Taxes (ad valorem, etc.)	.....	13,447.76	16,914.15
	317.99	960,254.62	12,880,026.37
	09.40	260,814.73	5,102,404.04
PROFIT FROM SALE OF CAP	.....	.....	.....
Income before indirect charg	09.40	260,814.73	5,102,404.04
INDIRECT CHARGES:			
Overhead	690.68	41,700.00	113,834.11
Taxes—State income	.....	115.65	12,065.00
Taxes—Social Security, Sales	662.37	2,087.48	10,523.72
	53.05	43,903.13	136,422.83
Income before reserves and	956.35	216,911.60	4,965,981.21
RESERVES:			
General extinguishments	42.77	.....	9,898.80
Depreciation	938.00	112,236.36	191,815.46
Retirements	43.42)	6,638.60	830.09
Dry holes	.....	.....	.....
Depletion	.....	.....	.....
Intangible development cost	.....	.....	.....
Expired and surrendered lea	.....	.....	.....
	37.35	118,874.96	202,544.35
Net income before Federal	119.00	98,036.64	4,763,436.86
PROVISION FOR FEDERAL T	00.00	15,018.62	1,264,700.00
NET INCOME	19.00	83,018.02	3,498,736.86

Prepared by Comptroller's Depa
Consolidated Statements Section
January 31, 1950
( ) Denotes red figures

FOLD OUT TO LARGE TO BE FILMED

[6241]

[6242]

[6243]

[6244]

Exhibit No. 7

[Note: This exhibit was rejected by the Examiner at record 5519 and not received in evidence. An offer of proof was made on page 5763 of the record by the State of Wisconsin and the Public Service Commission of Wisconsin.]

BLEED THROUGH

BLURRED COPY

Schedule 2

[6242]

Gross Plant	Per Cent	Production Stock (Materials & Supplies)
$359,823,145.00	85.68	$ 1,257,935.00
60,130,665.00	14.32	210,243.00

Docket G-1148

Gas Sales:
Outside
Inside

Total Gas Sales (Sched

Operating Expenses (Schedule 4

Net Earnings before Federa
Taxes and Return All

Return at assumed rate of 8½'
(Schedule 2)

Excess Earnings and T

Note: Gas sales and operating e
reflected by the books wi

FOLD OUT TO LARGE TO BE FILMED

[6355]

Exhibit No. 9-A

CONTRACT

AGREEMENT made and entered into this 5th day of April, 1943, by and between PHILLIPS PETROLEUM COMPANY, a Delaware corporation, hereinafter referred to as "Phillips" and PANHANDLE EASTERN PIPE LINE COMPANY, a Delaware corporation, hereinafter referred to as "Panhandle Eastern."

WITNESSETH:

1. Panhandle Eastern is the owner of a gas pipe line system which secures the greater part of its supply of gas in the Hugoton gas field located in Kansas, Oklahoma and Texas and the Panhandle field located in Texas. Phillips represents that it is the owner of valid and subsisting gas leases covering one hundred seventy-five thousand (175,000) acres of land (hereinafter referred to as "the dedicated acreage") in the Hugoton field within an area in Texas County, Oklahoma, and the Northern parts of Sherman and Hansford Counties, Texas, which area is described as follows:

• • •

[6367]

10. All gas delivered by Phillips under the terms of this contract shall contain less than one (1) grain of hydrogen sulphide per one hundred (100) cu. ft. of gas and less

BLEED THROUGH

BLURRED COPY

than twenty (20) grains of total sulphur per one hundred (100) cu. ft. The heating value of all gas delivered hereunder shall in no event, at the time and place of delivery, be less than nine hundred and fifty (950) British Thermal Units per cu. ft. and, in the event the heating value of such gas shall be less than nine hundred and seventy-five (975) British Thermal Units per cu. ft., the

[6368]

price of such gas, as hereinafter provided, shall be decreased to that proportionate part of such price that the British Thermal Unit content of such gas per cu. ft. bears to nine hundred and seventy-five (975). All gas delivered by Phillips from the dedicated acreage and all supplemental deliveries of gas delivered at the same delivery point, as provided in paragraph 8 (b) above, shall be dehydrated by Phillips to a point sufficient that formation of hydrates in the line will not interfere with the transportation of such gas through Panhandle Eastern's pipe line to its Liberal Station.

* * *

[6376]

Exhibit No. 9-B

SUPPLEMENTAL CONTRACT

Between

PHILLIPS PETROLEUM COMPANY

and

PANHANDLE EASTERN PIPE LINE COMPANY

April 5, 1943

* * *

[6382]

ARTICLE V

(POINT OF DELIVERY)

The point of delivery of all gas to be delivered by Phillips to Panhandle Eastern hereunder shall be at the suction side of Panhandle Eastern's Sneed Compressor Station, at a point on Panhandle Eastern's station site to be mutually agreed upon by Panhandle Eastern and Phillips.

ARTICLE VI

(PRESSURE)

Delivery of gas hereunder shall be made at the point of delivery at a minimum pressure of two hundred seventy-

BLEED THROUGH

BLURRED COPY

five pounds to the square inch gauge, and Phillips agrees to install and maintain such compressing equipment as shall be necessary to maintain such minimum delivery pressure.

ARTICLE VII

(QUALITY)

1. Phillips agrees that the gas delivered hereunder shall be natural gas produced from gas acreage owned and controlled by Phillips in the Panhandle field of Texas. Phillips shall have the right, before delivery to Panhandle Eastern, to remove a portion of the hydrocarbons from such gas; provided, however, that no natural gas delivered hereunder shall have a total heating value at the point of delivery below 1000 British thermal units per cubic foot.

2. All gas delivered by Phillips under the terms of this contract shall be merchantable dry gas and shall contain less than one grain of hydrogen sulphide per one hundred cubic feet of gas and less than twenty grains of total sulphur per one hundred cubic feet. Phillips agrees that the gas delivered hereunder shall not contain an amount of moisture at any time exceeding that corresponding to saturation at the temperature and pressure of the gas at the point of delivery and that water shall not be present in liquid phase.

3. In the event Phillips shall deliver, or tender for delivery, to Panhandle Eastern, gas not measuring up to the minimum standards of purity and quality set forth in this

agreement, Panhandle Eastern (in addition to any other remedy it may have) shall have the right to refuse to accept deliveries of such gas until the deficiency or deficiencies are corected and, if not corrected within ninety days, to terminate this contract without liability to Phillips except for the payment for gas theretofore delivered.

4. Phillips warrant that the content of hydrogen sulphide, mercaptans and carbon dioxide, respectively, of all gas delivered hereunder, will not exceed the content of hydrogen sulphide, mercaptans and carbon dioxide, respectively, of the gas going into Panhandle Eastern's Sneed station from all other sources in the Panhandle field, and that no gas delivered hereunder shall be more corrosive or harmful to Panhandle Eastern's facilities than the gas going into Panhandle Eastern's Sneed Station from all other sources in the Panhandle field and that no such gas shall cause any gas in Panhandle Eastern's pipe line system to be unsaleable under any now existing contract of Panhandle Eastern. For violation of this warranty, Phillips shall be responsible to Panhandle Eastern in damages, and Panhandle Eastern may at its option refuse to accept further deliveries from Phillips until the condition or conditions causing such violation shall have been removed, and, if not removed within ninety days, Panhandle Eastern shall have the right to terminate this contract without liability to Phillips except for payment for gas theretofore delivered.

• • •

BLEED THROUGH

BLURRED COPY

[6404]

Exhibit 9-C

PROCESSING CONTRACT

AGREEMENT made and entered into this 25th day of May, 1943, by and between PANHANDLE EASTERN PIPE LINE COMPANY, a Delaware corporation, hereinafter referred to as "Panhandle Eastern," and PHILLIPS PETROLEUM COMPANY, a Delaware corporation, hereinafter referred to as "Phillips,"

WITNESSETH:

PART ONE — PROCESSING OF GAS

ARTICLE I.

Scope of Agreement.

1. The parties hereto have entered into a certain Supplemental Contract, hereinafter referred to as the "Supplemental Contract," dated April 5, 1943, which provides that, subject to the happening of contingencies therein stated, Phillips shall sell and deliver to Panhandle Eastern and Panhandle Eastern shall purchase and receive certain volumes of natural gas produced from acreage owned and controlled by Phillips in the Panhandle Field of Texas, such gas to be delivered by Phillips to Panhandle Eastern at the suction of Panhandle Eastern's Sneed Compressor Station in the Panhandle Field. Said Supplemental Contract is hereby referred to for all pertinent purposes.

2. The verb "process" as used in its various forms herein shall refer only to the extraction of hydrocarbons from natural gas.

3. Under the terms of said Supplemental Contract Phillips has the right, before delivery of gas thereunder to Panhandle Eastern, to process such gas within the limitations provided in said Supplemental Contract, and the parties hereto have now agreed that, subject to and in accordance with the provisions of this Processing Contract, Phillips shall process all natural gas produced and purchased by Panhandle Eastern in the Panhandle Field, including the natural gas delivered by Phillips under said Supplemental Contract. Accordingly, it is hereby agreed by the parties hereto

[6405]

that, subject to the conditions stated in said Supplemental Contract upon the respective obligations of the parties hereto to perform said Supplemental Contract and subject also to Phillips' obtaining all authorizations and materials necessary for the performance of this contract by Phillips as hereinafter provided, Phillips shall construct a natural gasoline plant near or adjacent to Panhandle Eastern's Sneed Station in the Panhandle Field and shall process in said plant all natural gas produced and purchased by Panhandle Eastern in the Panhandle Field of Texas.

ARTICLE II.

Construction, Ownership and Operation of Plant.

1. Phillips agrees that, proceeding immediately, it will use its best efforts to obtain a plant site adjacent to the site of Panhandle Eastern's Sneed Station and all necessary authorizations and materials for the construction of a natu-

BLEED THROUGH

BLURRED COPY

ral gasoline plant on said site of sufficient size and capacity to process not less than two hundred thirty million (230,000,000) cubic feet of natural gas per day and, in the event such site and authorizations and materials can be obtained and subject to the obtaining of all necessary authorizations and materials for the performance of said Supplemental Contract as therein provided, it will proceed with diligence in the construction of such natural gasoline plant. Unless said natural gasoline plant shall be in operations prior to the expiration of eighteen (18) months from the date hereof, all of the provisions of this Processing Contract, except the provisions of PART TWO hereof, shall terminate at the end of such eighteen (18) month period.

2. Said natural gasoline plant shall be designed and constructed to receive the natural gas from Panhandle Eastern's pipe line, after such gas shall have passed through the compressors in the Sneed Station, at the operating pressure on said line not to exceed five hundred fifty (550) pounds per square inch gauge and to process the gas and return it into Panhandle Eastern's line with a loss in pressure through the natural gasoline plant of not to exceed ten (10) pounds per square

[6406]

inch gauge and at a temperature within four (4) degrees of the temperature at which the natural gas is received into the natural gasoline plant.

3. Said natural gasoline plant shall be constructed and operated at the sole cost and expense of Phillips and shall be the sole property of Phillips. Subject only to the pro-

visions of this Processing Contract, Phillips shall have the sole management and control of the operation of said natural gasoline plant, and Panhandle Eastern shall have no responsibility with respect to any gas, or on account of anything which may be done, happen or arise with respect thereto, after it has been delivered to Phillips for processing purposes, until such gas, after processing, has been redelivered to Panhandle Eastern.

ARTICLE III.

Shrinkage and Natural Gasoline Extraction.

1. The term "Phillips' gas" will be used herein to mean the natural gas delivered by Phillips to Panhandle Eastern at the suction of the Sneed Station under the terms of said Supplemental Contract above mentioned and the term "Panhandle Eastern's gas" will be used to mean all natural gas produced and purchased by Panhandle Eastern in the Panhandle Field and processed in said natural gasoline plant other than Phillips' gas as so defined.

2. Until the date on which, under the terms of the Gas Contract dated April 5, 1943, between the parties hereto, which is referred to in the Supplemental Contract as the "Original Contract," Phillips first delivers gas to Panhandle Eastern from the dedicated acreage in Texas County, Oklahoma and Sherman and Hansford Counties, Texas, described in said Gas Contract, Phillips shall extract from Panhandle Eastern's gas natural gasoline having a Reid vapor pressure of twenty-six (26) pounds at one hundred degrees (100°) Fahrenheit. Thereafter, the natural gasoline

BLEED THROUGH

BLURRED COPY

extracted by Phillips from Panhandle Eastern's gas shall have such Reid vapor pressure at one hundred degrees (100°) Fahrenheit as shall be designated from time to time by Panhandle Eastern, in a number of pounds which shall be a multiple of

[6407]

two, and shall not be more than twenty-six (26) pounds nor less than fourteen (14) pounds; provided that Phillips shall not be required at any time to extract from Panhandle Eastern's gas a natural gasoline having a Reid vapor pressure at one hundred degrees (100°) Fahrenheit of less than twenty-six (26) pounds unless, at that time, the natural gasoline extracted by Panhandle Eastern at its Liberal Gasoline Plant near Liberal, Kansas, shall have a Reid vapor pressure at one hundred degress (100°) Fahrenheit of not to exceed fourteen (14) pounds. At least sixty (60) days prior to the commencement of each annual period, beginning with the date of first delivery of gas from the dedicated acreage under said Original Contract, Panhandle Eastern shall designate to Phillips in writing the vapor pressure natural gasoline, within the limitations hereinabove stated, to be extracted by Phillips from Panhandle Eastern's gas during such yearly period or until further designation as herein provided. During any such yearly period Panhandle Eastern may designate by written notice to Phillips a different vapor pressure natural gasoline, within the limitations hereinabove stated, to be extracted by Phillips from Panhandle Eastern's gas beginning on a date not sooner than sixty (60) days from such designation. Phillips agrees that it will at all times extract at least 95%

of the pentanes and heavier products from all gas processed in said natural gasoline plant.

3. It is agreed that, instead of the delivery by Phillips to Panhandle Eastern, under the Supplemental Contract, of natural gas with a portion of the hydrocarbons previously removed in accordance with the provisions of said Supplemental Contract, Phillips shall have the right to deliver the gas without the removal of hydrocarbons therefrom, and shall have the right to retain all natural gasoline extracted by Phillips in said natural gasoline plant from Phillips' gas delivered under the terms of said Supplemental Contract. It is further agreed that Phillips shall deliver to Panhandle Eastern at the point of delivery under said Supplemental Contract, without charge to Panhandle Eastern, in addition to the

[6408]

volumes of gas delivered under the terms of said Supplemental Contract, a volume of natural gas equal to the volume of gas lost by shrinkage due to extraction of natural gasoline in said natural gasoline plant from the natural gas delivered under said Supplemental Contract. As a part of the consideration for this contract, Phillips also agrees to deliver to Panhandle Eastern at the same point of delivery, without charge to Panhandle Eastern, a volume of natural gas equal to the volume of gas lost by shrinkage due to extraction of natural gasoline in said natural gasoline plant from Panhandle Eastern's gas. The limitation upon the extraction of gasoline from the gas delivered hereunder equal to volumes of gas lost by shrinkage of Phillips' gas shall

BLEED THROUGH

BLURRED COPY

be as provided in the Supplemental Contract in respect of Phillips' gas; and the vapor pressure of the gasoline extracted from the gas delivered hereunder equal to volumes of gas lost by shrinkage of Panhandle Eastern's gas shall be the vapor pressure designated by Panhandle Eastern in respect of Panhandle Eastern's gas as provided in paragraph 2 of this Article III. All such gasoline shall belong to Phillips. The volumes of all gas furnished under the provisions of this Paragraph 3, equal to volumes of gas lost by shrinkage of Phillips' gas and shrinkage of Panhandle Eastern's gas shall be determined by multiplying the total number of gallons of natural gasoline produced each day in said natural gasoline plant (except the gasoline extracted from the gas furnished by Phillips for fuel in the operation of the natural gasoline plant) by the number of cubic feet per gallon as determined by Table II of Exhibit "A" attached hereto.

* * *

[6532]

Exhibit No. 10-K

CONTRACT

AGREEMENT made and entered into this 13th day of October, 1945, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation with an office at El Paso, Texas, hereinafter referred to as "El Paso", and PHILLIPS PETROLEUM COMPANY, a Delaware corporation with an office at Bartlesville, Oklahoma, hereinafter referred to as "Phillips",

* * *

[6550]

ARTICLE V

Delivery Points

1. The point of delivery for all gas delivered hereunder from each of Phillips' four gasoline plants in the Permian Basin Area shall be at the outlet of the meter station to be installed and operated by El Paso near the property line of such plant and on the discharge side thereof.

2. The point of delivery for all gas delivered hereunder from the Panhandle and Hugoton Fields shall be at the outlet of the meter station to be installed and operated by El Paso at the outlet of Phillips' gathering and other facilities to be located within two (2) miles of the southeast corner of Section 198, Block 44, H&TC RR Company Survey, Moore County, Texas. Not later than thirty (30) days after El Paso shall have notified Phillips in writing that El Paso is ready to begin construction of the Pipe Line Phillips shall notify El Paso in writing of the location selected for such outlet.

ARTICLE VI

Pressure

1. All gas delivered hereunder at the delivery points in the Permian Basin Area shall be delivered at the discharge pressures of the respective gasoline plants but at not less than forty-five (45) pounds per square inch gauge at the Eunice Plant and forty (40) pounds per square inch gauge at the other three gasoline plants.

BLEED THROUGH

BLURRED COPY

2. All gas delivered hereunder from the Panhandle and Hugoton Fields of Texas shall be delivered at the pressure available in Phillips' facilities, but at not less than two hundred (200) pounds per square inch gauge.

[6551]

ARTICLE VII

QUALITY

1. All gas delivered by Phillips under the terms of this contract shall conform to the following specifications:

A. For gas delivered at the points of delivery in the Permian Basin Area:

(a) AIR. Phillips shall make diligent effort to prevent the introduction of any air into gas delivered at such delivery points. If the oxygen content of such gas exceeds two-tenths of one per cent (0.2%) by volume at any time El Paso may refuse to accept delivery of such gas.

(b) HYDROGEN SULPHIDE. El Paso shall not be required to accept delivery of gas having a hydrogen sulphide content exceeding one thousand (1000) grains per one hundred (100) cubic feet of gas unless Phillips shall pay for or tender payment for the increased cost of treating such gas above the cost of treating gas containing one thousand (1000) grains of hydrogen sulphide per one hundred (100) cubic feet.

(c) LIQUIDS. The gas shall be free of water and hydrocarbons in liquid form at the temperature and pressure at which the gas is delivered.

(d) DUST, GUMS AND SOLID MATTER. The gas shall be commercially free of dust, gums and other solid matter.

(e) HEATING VALUE. The total gross heating value shall not be less than nine hundred fifty (950) British thermal units per cubic foot and Phillips agrees that during the first five years after the beginning of delivery from the delivery points in the Permian Basin Area it will not change its operations of the four gasoline plants from the present methods of operation nor will it reduce the heating value of such gas by such operations below one thousand fifty (1050) British thermal units per cubic foot and will not after such five year period so operate its said four gasoline plants as to reduce the heating value of such gas below nine hundred eighty-five (985) British thermal units per cubic foot.

The specifications for hydrogen sulphide content and heating value in this subsection A shall apply to the average of the composite gas delivered hereunder at delivery points in the Permian Basin Area during each day.

Phillips agrees that, if and when, during any calendar month, it shall have any volumes of surplus gas available at any of the four

BLEED THROUGH

BLURRED COPY

gasoline plants above named in the Permian Basin Area not contracted to others and not required in its own operations, El Paso shall have the right to receive, without charge, a volume of such available surplus gas up to a volume equal to the volume of carbon dioxide (CO_2) removed by El Paso during the preceding calendar month from the gas delivered to El Paso from such plants under the provisions of ARTICLE IV hereof. The volumes of such available surplus gas received by El Paso under the provisions of this paragraph shall not be considered in determining any volumes of gas delivered under the provisions of ARTICLE IV hereof.

B. For all gas delivered at the point of delivery in Moore County, Texas:

(a) OXYGEN. The oxygen content shall not exceed two-tenths of one per cent (0.2%) by volume.

(b) HYDROGEN SULPHIDE. The hydrogen sulphide content shall not exceed one-quarter (1/4) grain per one hundred (100) cubic feet of gas. Phillips agrees that the process of treatment which it will use for removal of hydrogen sulphide from gas deliverable at the delivery point in Moore County, Texas, will be the Girbitol process or its equivalent and that such treating plant will be operated to reduce the hydrogen sulphide content below one-quarter (1/4) grain per one hundred (100) cubic feet insofar as the plant installed will do so in normal operation.

(c) ORGANIC SULPHUR. The gas shall not contain more than five grains of organic sulphur (Mercaptans) per one hundred cubic feet.

(d) LIQUIDS The gas shall be free of water and hydrocarbons in liquid form at the temperature and pressure at which the gas is delivered.

(e) DUST, GUMS AND SOLID MATTER. The gas shall be commercially free of dust, gums and other solid matter.

(f) CARBON DIOXIDE. The gas shall not contain more than one per cent (1.0%) by volume of carbon dioxide.

(g) HEATING VALUE. The total gross heating value shall not be less than nine hundred fifty (950) British thermal units per cubic foot.

C. Within the limits of the minimum heating value specifica-

[6653]

tions above, Phillips shall have the right before delivery of the gas to El Paso to remove from the gas delivered hereunder any constituents thereof other than methane, and shall have the right to remove such methane as is necessarily removed from the gas in the process of removing other constituents.

D. El Paso shall have the right to reject any gas which does not meet the specifications set forth in this ARTICLE VII.

* * *

BLEED THROUGH

BLURRED COPY

[6613]

Exhibit No. 10-W

CONTRACT

AGREEMENT made and entered into January 1, 1948, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, with an office at El Paso, Texas, hereinafter referred to as "El Paso", and PHILLIPS PETROLEUM COMPANY, a Delaware corporation, with an office at Bartlesville, Oklahoma, hereinafter referred to as "Phillips".

* * *

[6618]

ARTICLE IV

Sales and Purchase of Gas

1. Within the limits of the volume of gas in respect of which El Paso is granted the first and preferential right of purchase under Section 2 of ARTICLE III hereof, it is agreed that, subject to the provisions of subsection D of Section 3 of ARTICLE I hereof, El Paso shall purchase and receive of and from Phillips and Phillips shall sell and deliver to El Paso, at the delivery points specified in ARTICLE V hereof, beginning not later than January 1, 1951, a daily average volume of eighty million (80,000,000) cubic feet, but not to exceed eighty-eight million (88,000,-

000) cubic feet in any one day and not to exceed in any one day at any delivery point a volume equal to one and one-tenth (1.1) times the average daily volume of gas purchased by El Paso at such delivery point during the twelve consecutive months preceding the calendar month in which such day occurs (or during the period elapsed since the beginning of such deliveries, whichever is the shorter).

2. In order that Phillips shall be able to market or otherwise dispose of surplus gas not purchased by El Paso at the four gasoline plants in the Permian Basin Area, it is agreed that gas shall be accepted by El Paso from said plants in the following order of precedence:

First —The Eunice Plant

Second—The Fullerton Plant

Third —The Seminole Plant

Fourth—The Goldsmith Plant

and that, as a condition upon El Paso's right to receive gas from the second, third or fourth of said plants, El Paso shall at the same time accept the total volume of surplus gas available for delivery hereunder from the plants preceding said plant in the above order of precedence.

[6619]

3. Phillips agrees that, if and when, during any calendar month, it shall have any volumes of surplus gas available at any of the four gasoline plants above named in the Permian Basin Area not contracted to others, or to El Paso under any other contract, and not required for its

BLEED THROUGH

BLURRED COPY

own operations, El Paso shall have the right to receive at each delivery point, without charge, in addition to the volumes deliverable under Section 1 of this ARTICLE IV, additional volumes of such available surplus gas as follows:

A. A volume of such surplus gas available at such delivery point up to a volume equal to the volume of carbon dioxide (CO_2) and hydrogen sulphide (H_2S) removed by El Paso during the preceding calendar month from the gas delivered to El Paso at such delivery point under the provisions of Section 1 of this ARTICLE IV.

B. A volume of such surplus gas available at such delivery point up to the volume required for fuel for the operation of El Paso's initial compressor station and other facilities used in compressing gas delivered hereunder at that delivery point.

Volumes of such available surplus gas received by El Paso under the provisions of this paragraph shall not be considered in determining any volumes of gas delivered under the preceding sections of this ARTICLE IV.

4. In the event deliveries of gas to El Paso at any delivery point are by reason of causes within control of Phillips or force majeure intervention less than the volume which El Paso is entitled otherwise to receive hereunder, the volume which El Paso would have taken except for such failure to deliver shall be used in computing the limitation on maximum daily deliveries specified in this section of one and one-tenth (1.1) times the average daily

volume of gas purchased by El Paso at said delivery points during the twelve consecutive months preceding the calendar month in which such day occurs.

[6620]

ARTICLE V

Delivery Points

1. The point of delivery for all gas delivered hereunder from each of Phillips' four gasoline plants in the Permian Basin Area shall be at the outlet of the meter station to be installed and operated by El Paso near the property line of such plant and on the inlet side of El Paso's compressor station.

2. Phillips may at any time and from time to time at its option make deliveries of volumes of gas which it has contracted to supply El Paso from its four named plants in the Permian Basin Area, if available, from any other source or sources in lieu of deliveries from said four named plants or to supply all or any part of any deficiency between the amounts available at said four named plants plus volumes from any source from which Phillips has elected to deliver deficiencies pursuant to this section and such contract volumes. Gas delivered pursuant to the option granted in this section from any other source or sources shall meet the quality specifications of this contract and be of the same quality as gas in the Pipe Line at the point where delivered or of a higher quality and may be delivered at any point on the Pipe Line. In the event El Paso shall not have capacity in facilities installed for receiving the

BLEED THROUGH

BLURRED COPY

gas at and handling the same from the point selected by Phillips for delivering such gas, cost of installing required facilities will be borne by Phillips. If, in any calendar year during the term of this contract there shall not have been sufficient available surplus gas at the said four named plants to provide an average daily volume equal to the contract volume specified for delivery therefrom if available and Phillips shall not have supplied the deficiency during such year from other source or sources, then if Phillips desires thereafter to

[6621]

supply all or any part of volumes required to assure full deliveries of contract volumes it may do so only if it notifies El Paso within thirty (30) days after the end of the aforesaid calendar year of its election to supply such deficiencies from other source or sources commencing within twelve (12) months from the date of such notice, and only if Phillips provides reasonable assurance to El Paso that it will have available for delivery under this contract from such other source or sources for a period of five (5) years not less than the average daily volumes of gas specified in such notice. Phillips will notify El Paso at least ninety (90) days in advance of delivery of any in lieu gas pursuant to the provisions of this section. Any notice pursuant to this section will specify the delivery point, source or sources, the average daily volumes of gas to be delivered, and the time when such deliveries will be commenced.

ARTICLE VI

Pressure

All gas delivered hereunder shall be delivered at the pressures existing in Phillips' facilities at the respective gasoline plants but at not less than forty-five (45) pounds per square inch gauge at the Eunice Plant and forty (40) pounds per square inch gauge at the other gasoline plants.

ARTICLE VII

Quality

1. All gas delivered by Phillips under the terms of this contract shall conform to the following specifications:

A. *Air.* Phillips shall make diligent effort to prevent the introduction of any air into gas delivered hereunder. If the oxygen content of such gas exceeds two-tenths of one per cent (0.2%) by volume at any time El Paso may refuse to accept delivery of such gas.

[6622]

B. *Hydrogen Sulphide.* El Paso shall not be required to accept delivery of gas having a hydrogen sulphide content exceeding one thousand (1000) grains per one hundred (100) cubic feet of gas unless Phillips shall pay for or tender payment for the increased cost of treating such gas above the cost of treating gas containing one thousand (1000) grains of hydrogen sulphide per one hundred (100) cubic feet.

BLEED THROUGH

BLURRED COPY

C. *Liquids.* The gas shall be free of water and hydrocarbons in liquid form at the temperature and pressure at which the gas is delivered.

D. *Dust, Gums and Solid Matter.* The gas shall be commercially free of dust, gums and other solid matter.

E. *Heating Value.* The total gross heating value shall not be less than one thousand fifty (1050) British thermal units per cubic foot.

Notwithstanding the foregoing, during any period in which Phillips makes deliveries to El Paso of gas from plants in the Permian Basin Area under other contracts, the specifications for heating value and hydrogen sulphide content of all contracts for such deliveries shall be considered together, and the weighted average of such specifications shall apply to the average of the composite gas delivered to El Paso at delivery points in the Permian Basin Area during each day.

2. El Paso shall have the right to reject any gas which does not meet the specifications set forth in this ARTICLE VII.

ARTICLE VIII

Extraction of Liquids

1. Within the limits of the minimum heating value specifications

stated above, Phillips shall have the right to remove from the gas delivered hereunder any constituents thereof other than methane and shall have the right to remove such methane as is necessarily removed from the gas in the process of removing other constituents.

2. In order that it may take advantage of the increased pressures, Phillips shall have the right to install extraction facilities downstream from El Paso's compressor stations to be located at each delivery point and upstream from El Paso's dehydration and desulphurization equipment. Notwithstanding any other provision of this contract, in the event it does so operate extraction facilities downstream from El Paso's compressor stations:

A. The specifications in ARTICLE VII shall be applicable to the gas at the delivery point above specified, except that the specifications in respect of liquids and heating value shall be applicable to the gas at the discharge of Phillips' extraction facilities. The temperature of the gas delivered by Phillips at each of said delivery points shall not be less than sixty degrees (60°) Fahrenheit and, if in excess of sixty degrees Fahrenheit, shall not be greater than twenty degrees (20°) Fahrenheit above the atmospheric wet bulb temperature. El Paso will return the gas to Phillips at the inlet of Phillips' extraction facilities at as low a temperature as is practicable and not in excess of seventy degrees (70°) Fahrenheit or twenty degrees

BLEED THROUGH

BLURRED COPY

(20°) Fahrenheit above the atmospheric wet bulb temperature, whichever is greater.

B. The reduction in volumes of gas delivered hereunder due to the extraction of hydrocarbons and use of fuel in Phillips' extraction facilities and due to the extraction of hydrocarbons in El Paso's initial compressor stations shall be determined in accordance with

[6624]

the procedure stated in Exhibit "B" attached hereto.

C. Phillips will deliver to El Paso at said delivery points volumes of gas sufficient to assure El Paso net volumes (i. e. volumes after deduction from the total volumes of gas delivered hereunder, shrinkage due to the extraction of hydrocarbons and due to gas taken for fuel in Phillips' extraction facilities) equal to those specified hereinabove for delivery in the Permian Basin Area, and El Paso shall pay for *only* such net volumes.

D. Such extraction facilities and the appurtenant equipment installed by Phillips shall be designed, constructed and operated to receive the gas after the same shall have passed through El Paso's initial compressor stations at the operating pressure on the pipe line not to exceed six hundred (600) pounds per square inch gauge pressure and to process the gas and return it into El Paso's facilities with a loss in pressure not to exceed fifteen (15) pounds per square inch gauge, and at a temperature not to exceed by more than five de-

grees (5°) Fahrenheit the temperature of the gas as received.

E. As reimbursement to El Paso for the cost of compression of the volume of gas shrinkage in such extraction facilities and El Paso's initial compressor stations due to the extraction of hydrocarbons and compression of the volumes of gas taken from the Pipe Line and used as fuel in said extraction facilities and appurtenances thereto, Phillips agrees to pay El Paso one and seventy-five one-hundredths cents (1.75¢) per one thousand (1000) cubic feet of the volume of gas shrinkage in the extraction facilities and compressor stations due to the extraction of hydrocarbons and of the volume of gas taken from the Pipe Line and used as fuel in said extraction

[6625]

facilities and appurtenances thereto, all such volumes to be determined as above provided. Phillips may take gas for fuel for the operation of its extraction facilities and/or appurtenances thereto downstream from El Paso's desulphurization equipment, in which event volume so taken will be measured by suitable orifice meter and Phillips will pay to El Paso, in addition to one and seventy-five one-hundredths cents (1.75¢) per one thousand cubic feet above provided, seventy-five one-hundredths cents (0.75¢) per one thousand cubic feet of fuel gas so taken downstream from El Paso's desulphurization equipment. The sums due from Phillips to El Paso each month under the terms of this sub-

BLEED THROUGH

BLURRED COPY

section E shall be deducted from the statement from Phillips to El Paso for gas purchased during such month.

F. Phillips shall be entitled to all hydrocarbons removed from the gas through the operation of El Paso's initial compressor stations and may install appropriate connections to take delivery thereof from El Paso's facilities.

G. Cost of all facilities which would not have been installed if Phillips had not installed extraction facilities downstream from El Paso's compressor station will be borne by Phillips. Phillips will bear any tax burden caused solely by the operation of its extraction facilities downstream rather than upsteam from delivery points.

H. Phillips shall indemnify El Paso and hold it harmless of and from any and all cost or liability due to the construction, maintenance or operation of Phillips' said extraction facilities and appurtenances thereto, and the possession of or the handling

[6626]

or loss of the gas from the time it is received by Phillips at the discharge of El Paso's initial compressor station until it is returned to El Paso's facilities.

• • •

[6653]

Exhibit No. 10-BB

CONTRACT

AGREEMENT made and entered into November 4, 1948, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, with an office at El Paso, Texas, hereinafter referred to as "El Paso", and PHILLIPS PETOLEUM COMPANY, a Delaware corporation, with an office at Bartlesville, Oklahoma, hereinafter referred to as "Phillips",

WITNESSETH:

WHEREAS, Phillips represents that it owns and operates a natural gasoline plant located in the Goldsmith Field in Ector County, Texas, hereinafter referred to as the "Goldsmith Plant" or "said plant", and in said plant Phillips processes, for the extraction and manufacture of gasoline and other products, gas produced in the Goldsmith and other fields, some of which is produced from Phillips' leases in said fields but the greater part of which is purchased by Phillips under contracts which are for relatively short terms but which Phillips expects, but does not guarantee, to be able to renew from time to time; and

WHEREAS, after the extraction of gasoline and other products from gas processed in said plant it is necessary to use gas from said plant for the operation of the plant and to deliver gas to the leases for development and opera-

BLEED THROUGH

BLURRED COPY

tion of the leases, but Phillips expects to have available for sale surplus residue gas (as hereinafter defined) at said plant and El Paso is desirous of purchasing such gas.

NOW, THEREFORE, the parties hereto have agreed that:

• • •

[6657]

ARTICLE VII.

Extraction of Liquids

1. Within the limits of the minimum heating value specifications stated above, Phillips shall have the right to remove from the gas delivered hereunder any constituents thereof other than methane and shall have the right to remove such methane as is necessarily removed from the gas in the process of removing other constituents.

2. In the event El Paso shall compress any portion of the gas delivered hereunder, Phillips, in order that it may take advantage of the increased pressures in the extraction of hydrocarbons from such gas, shall have the right to install and operate extraction facilities downstream from El Paso's compressor station located at the delivery point and upstream

[6658]

from El Paso's dehydration and desulphurization equipment. Notwithstanding any other provision of this contract, in the event it does so operate extraction facilities downstream from El Paso's compressor station:

A. As to gas so compressed, the specifications in Article VI shall be applicable to such gas at the delivery point, except that the specifications in respect of liquids and heating value shall be applicable to such gas at the discharge of Phillips' extraction facilities. The temperature of the gas delivered by Phillips at said delivery point shall not be less than sixty degrees (60°) Fahrenheit and, if in excess of sixty degrees (60°) Fahrenheit, shall not be greater than twenty degrees (20°) Fahrenheit above the atmospheric wet bulb temperature. El Paso will return the gas to Phillips at the inlet of Phillips' extraction facilities at as low a temperature as is practicable and not in excess of seventy degrees (70°) Fahrenheit or twenty degrees (20°) Fahrenheit above the atmospheric wet bulb temperature, whichever is greater.

B. The reduction in volumes of gas delivered hereunder due to the extraction of hydrocarbons and use of fuel in Phillips' extraction facilities and due to the extraction of hydrocarbons in El Paso's initial compressor station shall be determined in accordance with the procedure stated in Exhibit "B" attached hereto.

C. Phillips will deliver to El Paso volumes of gas sufficient to assure El Paso net volumes (i. e. volumes after deduction from the total volumes of gas delivered hereunder, shrinkage due to the extraction of hydrocarbons and due to gas taken for fuel in

BLEED THROUGH

BLURRED COPY

Phillips' extraction facilities) equal to those specified hereinabove for delivery hereunder, and El Paso shall pay for only such net volumes.

D. Such extraction facilities and the appurtenant equipment installed by Phillips shall be designed, constructed and operated to receive the gas after the same shall have passed through El Paso's initial compressor station at the operating pressure on its pipe line at that point not to exceed six hundred (600) pounds per square inch gauge pressure and to process the gas and return it into El Paso's facilities with a loss in pressure not to exceed fifteen (15) pounds per square inch gauge, and at a temperature not to exceed by more than five degrees (5°) Fahrenheit the temperature of the gas as received.

E. As reimbursement to El Paso for the cost of compression of the volume of gas shrinkage in such extraction facilities and El Paso's initial compressor station due to the extraction of hydrocarbons and compression of the volumes of gas taken from El Paso's facilities and used as fuel in said extraction facilities and appurtenances thereto, Phillips agrees to pay El Paso one and seventy-five one-hundredths cents (1.75¢) per one thousand (1000) cubic feet of the volume of gas shrinkage in the extraction facilities and compressor station due to the extraction of hydrocarbons and of the volume of gas taken from El Paso's facilities and used as fuel in said extraction facilities

and appurtenances thereto, all such volumes to be determined as above provided. Phillips may take gas for fuel for the operation of its extraction

[6660]

facilities and/or appurtenances thereto downstream from El Paso's desulphurization equipment, in which event volume so taken will be measured by suitable orifice meter and Phillips will pay to El Paso, in addition to one and seventy-five one-hundredth cents (1.75¢) per one thousand cubic feet above provided, seventy-five one-hundredths cents (0.75¢) per one thousand cubic feet of fuel gas so taken downstream from El Paso's desulphurization equipment. The sums due from Phillips to El Paso each month under the terms of this subsection E shall be deducted from the statement from Phillips to El Paso for gas purchased during such month.

F. Phillips shall be entitled to all hydrocarbons removed from the gas through the operation of El Paso's initial compressor station and may install appropriate connections to take delivery thereof from El Paso's facilities.

G. Cost of all facilities which would not have been installed if Phillips had not installed extraction facilities downstream from El Paso's compressor station will be borne by Phillips. Phillips wil bear any tax burden caused solely by the operation of its extraction facilities downstream rather than upstream from the delivery point.

BLEED THROUGH

BLURRED COPY

H. Phillips shall indemnify El Paso and hold it harmless of and from any and all cost or liability due to the construction, maintenance or operation of Phillips' said extraction facilities and appurtenances thereto, and the possession of or the handling or loss of the gas from the time it is received by Phillips at the discharge of El Paso's initial compressor station until it is

[6661]

returned to El Paso's facilities.

* * *

[6678]

Exhibit No. 10-DD

CONTRACT

AGREEMENT made and entered into August 31, 1948, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, with an office at El Paso, Texas, hereinafter referred to as "El Paso", and PHILLIPS PETROLEUM COMPANY, a Delaware corporation, with an office at Bartlesville, Oklahoma, hereinafter referred to as "Phillips".

* * *

[6685]

ARTICLE V.

Delivery Point

The point of delivery for all gas delivered hereunder shall be at the outlet of the meter station to be installed

and operated by El Paso near the property line of said plant and on the inlet side of El Paso's compressor station and, if El Paso installs desulphurization equipment on the inlet side of such compressor station, then on the inlet side of such desulphurization equipment.

ARTICLE VI.

Pressure

All gas delivered hereunder shall be delivered at the pressures existing in Phillips' facilities at said plant but at not less than forty (40) pounds per square inch gauge.

ARTICLE VII.

Quality

1. All gas delivered by Phillips under the terms of this contract shall conform to the following specifications:

A. *Air.* Phillips shall make diligent effort to prevent the introduction of any air into gas delivered hereunder. If the oxygen content of such gas exceeds two-tenths of one per cent (0.2%) by volume at any time, El Paso may refuse to accept delivery of such gas.

B. *Liquids.* The gas shall be free of water and hydrocarbons in liquid form at the temperature and pressure at which the gas is delivered.

[6686]

C. *Dust, Gums and Solid Matter.* The gas shall be commercially free of dust, gums and other solid matter.

BLEED THROUGH

BLURRED COPY

D. *Heating Value.* The average gross heating value of gas delivered each month shall not be less than one thousand fifty (1050) British Thermal Units per cubic foot..

2. El Paso shall have the right to reject any gas which does not meet the specifications set forth in this Article VII.

* * *

[6842]

Exhibit No. 11-A

THIS CONTRACT, Made and entered into this 11th day of December, 1945, by and between MICHIGAN-WISCONSIN PIPE LINE COMPANY, a Delaware corporation, with an office at Detroit, Michigan, hereinafter referred to as "Buyer", and PHILLIPS PETROLEUM COMPANY, a Delaware corporation, with an office at Bartlesville, Oklahoma, hereinafter referred to as "Seller", WITNESSETH:

* * *

[6855]

ARTICLE IV.

DELIVERY POINT

The point of delivery for all gas delivered hereunder shall be at the outlet of the meter station to be installed and operated by Seller at a location to be selected by Seller on or before March 1, 1946, within one mile of the southwest corner of Section 8, Block 1, Public Free School Land

Survey, Hansford County, Texas. Upon selecting such location, Seller shall promptly advise Buyer thereof in writing.

ARTICLE V.

Pressure

All gas sold and purchased hereunder shall be delivered at the delivery point above specified at the pressure available in Seller's facilities, but not less than two hundred pounds per square inch gauge.

[6856]

ARTICLE VI.

Quality

1. All gas delivered by Seller under the terms of this contract shall conform to the following specifications:

(a) Odors and Solids. The gas shall be commercially free from objectionable odors, solid matter, dust, gums and gum-forming constituents which might interfere with its merchantability or cause injury to or interference with proper operation of the lines, regulators, meters or other appliances through which it flows.

(b) Oxygen. The gas shall not at any time have an oxygen content in excess of one per cent by volume, and Seller shall make every reasonable effort to keep the gas free of oxygen.

BLEED THROUGH

BLURRED COPY

(c) Liquids. The gas shall be free of water and hydrocarbons in liquid form.

(d) Hydrogen Sulphide. The gas shall not contain more than one grain of hydrogen sulphide per one hundred cubic feet.

(e) Total Sulphur. The gas shall not contain more than twenty grains of total sulphur (hydrogen sulphide and mercaptan sulphur) per one hundred cubic feet.

(f) Heating Value. The gas shall have a total heating value per cubic foot of not less than nine hundred seventy nor more than one thousand twenty British thermal units, the term "total heating value per cubic foot" meaning the number of British thermal units produced by the combustion, at constant pressure, of the amount of gas free from water vapor which would occupy a volume of one cubic foot at a temperature of sixty degrees Fahrenheit and under a pressure equivalent to that of thirty inches of mercury at thirty-two degrees Fahrenheit and under the standard gravitational force (the acceleration 980.665 c.m. per sec.) with air of the same temperature and pressure as the

gas, when the products of combustion are cooled to the initial temperature of gas and air and when the water formed by combustion is condensed to the liquid state. If the gas tendered for delivery by Seller to Buyer under this contract shall have a total heating value per cubic foot of less than nine hundred seventy

British thermal units, Seller shall at its own expense take such steps as shall be necessary to supply the deficiency in British thermal units.

2. Within the limits of the minimum heating value specification above, Seller shall have the right to remove from the gas delivered hereunder any constituents thereof other than methane, and shall have the right to remove such methane as is necessarily removed from the gas in the process of removing other constituents.

ARTICLE VII.

Natural Gasoline Plant

In order to meet the exigencies of Seller's operating conditions, it is agreed that Seller shall, at its option, have the right to install its natural gasoline plant, for the extraction of hydrocarbons from the gas delivered hereunder, on the Pipe Line downstream from Buyer's initial compressor station which will be located at or near the delivery point above specified. Not more than six months nor less than four months prior to the anticipated date of commencement of construction of the Pipe Line, Buyer shall notify Seller of such date, and Seller shall within thirty days thereafter notify Buyer in writing of Seller's election as to the location of such natural gasoline plant. In the event such plant shall be located downstream from Buyer's said initial compressor station,

(a) The specifications in Article VI in respect of Odors and Solids, Oxygen, Hydrogen Sulphide and

BLEED THROUGH

BLURRED COPY

Total Sulphur shall be applicable to the gas at the delivery point above specified, and the specifications in respect of Liquids and Heating Value shall be applicable to the gas at the discharge of Seller's said natural gasoline plant.

(b) Seller shall install and maintain metering equipment in such manner as to measure all volumes of gas lost by shrinkage in the natural gasoline plant and Buyer's initial compressor station due to extraction of hydrocarbons, and the volume of gas, if any, taken from the Pipe Line and used as fuel in said natural gasoline plant. Seller shall also install and maintain all devices and equipment reasonably necessary to control, and insofar as possible eliminate, pulsations affecting the accuracy of such metering equipment. Seller shall from time to time consult with Buyer with respect to the type, design and efficiency of such devices and equipment.

(c) In computing the volume of gas to be paid for by Buyer hereunder, the volume of gas lost by shrinkage in the natural gasoline plant and Buyer's initial compressor station due to extraction of hydrocarbons, and the volume of gas, if any, taken from the Pipe Line and used as fuel in said natural gasoline plant shall be deducted from the total volume of gas delivered to Buyer at the delivery point above specified.

(d) Such natural gasoline plant and the appurtenant equipment installed by Seller shall be designed,

constructed and operated to receive the gas after the same shall have passed through Buyer's initial compressor station, at the operating pressure on the Pipe Line, not to exceed nine hundred twenty-five pounds per square inch gauge pressure, and to process the gas and return it into Buyer's facilities with a loss in pressure not to exceed ten pounds per square inch gauge, and at a temperature within five degrees Fahrenheit of the temperature at which the gas is received by Seller at the discharge of Buyer's initial compressor station.

[6859]

(e) As reimbursement to Buyer for the cost of excess compression required by reason of Seller's natural gasoline plant and facilities, and for the cost of compression of the volume of gas lost by shrinkage in the natural gasoline plant and Buyer's initial compressor station due to extraction of hydrocarbons and compression of the volume of gas, if any, taken from the Pipe Line and used as fuel in said natural gasoline plant, Seller agrees to pay to Buyer one cent per one thousand cubic feet of the volume of gas lost by shrinkage in the natural gasoline plant and said compressor station due to extraction of hydrocarbons and the volume of gas, if any, taken from the Pipe Line and used as fuel in said natural gasoline plant, all such volumes to be determined as above provided. The sums due from Seller to Buyer each month under the terms of this subsection (e) shall be deducted from the state-

BLEED THROUGH

BLURRED COPY

ment from Seller to Buyer for gas purchased during such month.

(f) Seller shall be entitled to all hydrocarbons re-removed from the gas through the operation of Buyer's initial compressor station.

(g) Seller shall indemnify Buyer and hold it harmless of and from any and all cost or liability due to the construction, maintenance or operation of Seller's said natural gasoline plant and appurtenant facilities and the possession of, or the handling or loss of, the gas from the time it is received by Seller at the discharge of Buyer's initial compressor station until it is returned to Buyer's facilities.

• • •

[7175]

Exhibit No. 12-A

Revision of Exhibit No. 12, which is a diagram of pipe line facilities used to supply natural gas to Michigan Wisconsin Pipe Line Company at Sherman Plant, Texas.

BLEED THROUGH

BLURRED COPY

FOLD OUT TO LARGE TO BE FILMED

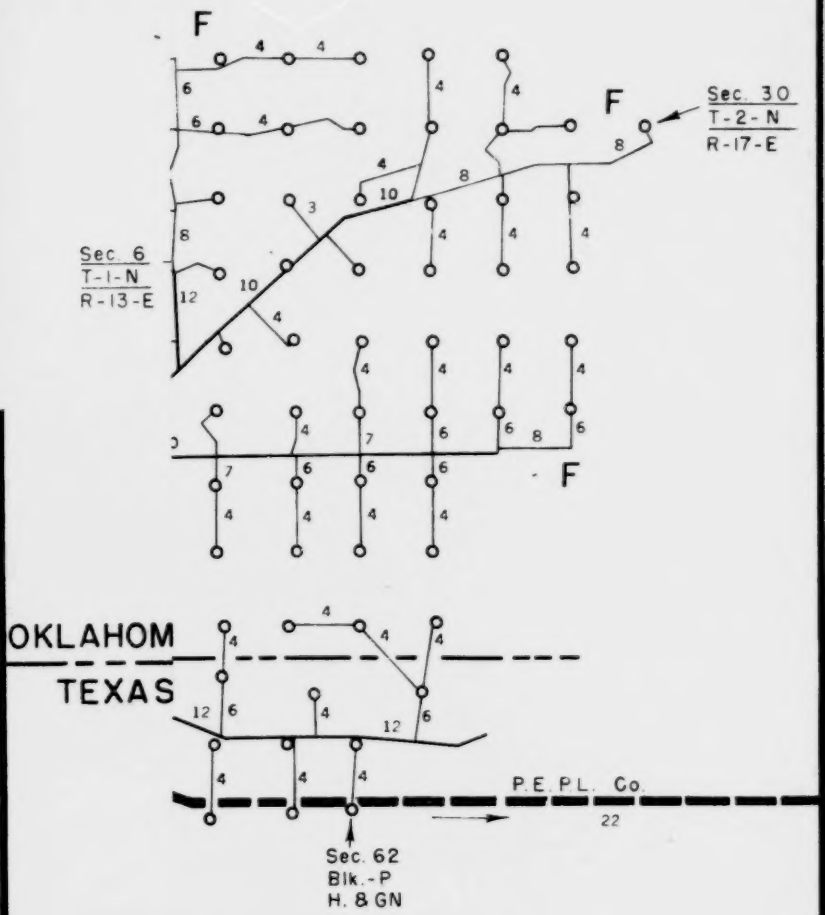
[7177]

Exhibit No. 13-A

Revision of Exhibit No. 13, which is a diagram of pipe line facilities used to supply natural gas to Panhandle Eastern Pipe Line Company at Hansford Plant, Texas.

BLEED THROUGH

BLURRED COPY



MAP No. 2

PHILLIPS PETROLEUM COMPANY

DIAGRAM OF

S USED TO SUPPLY NATURAL GAS

TO

ASTERN PIPE LINE COMPANY

FOLD OUT TO LARGE TO BE FILMED

[7179]

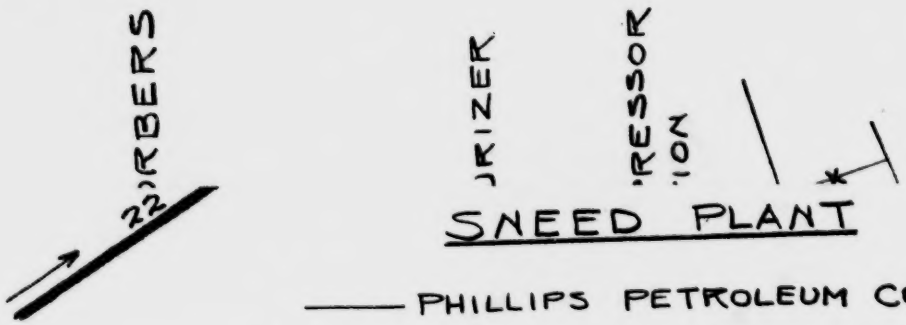
Exhibit No. 14-A

Diagram of certain pipe lines and facilities in and around Phillips Petroleum Company's Sneed Plant.

BLEED THROUGH

BLURRED COPY

MAP NO. 3A



FOLD OUT TO LARGE TO BE FILMED

[7180]

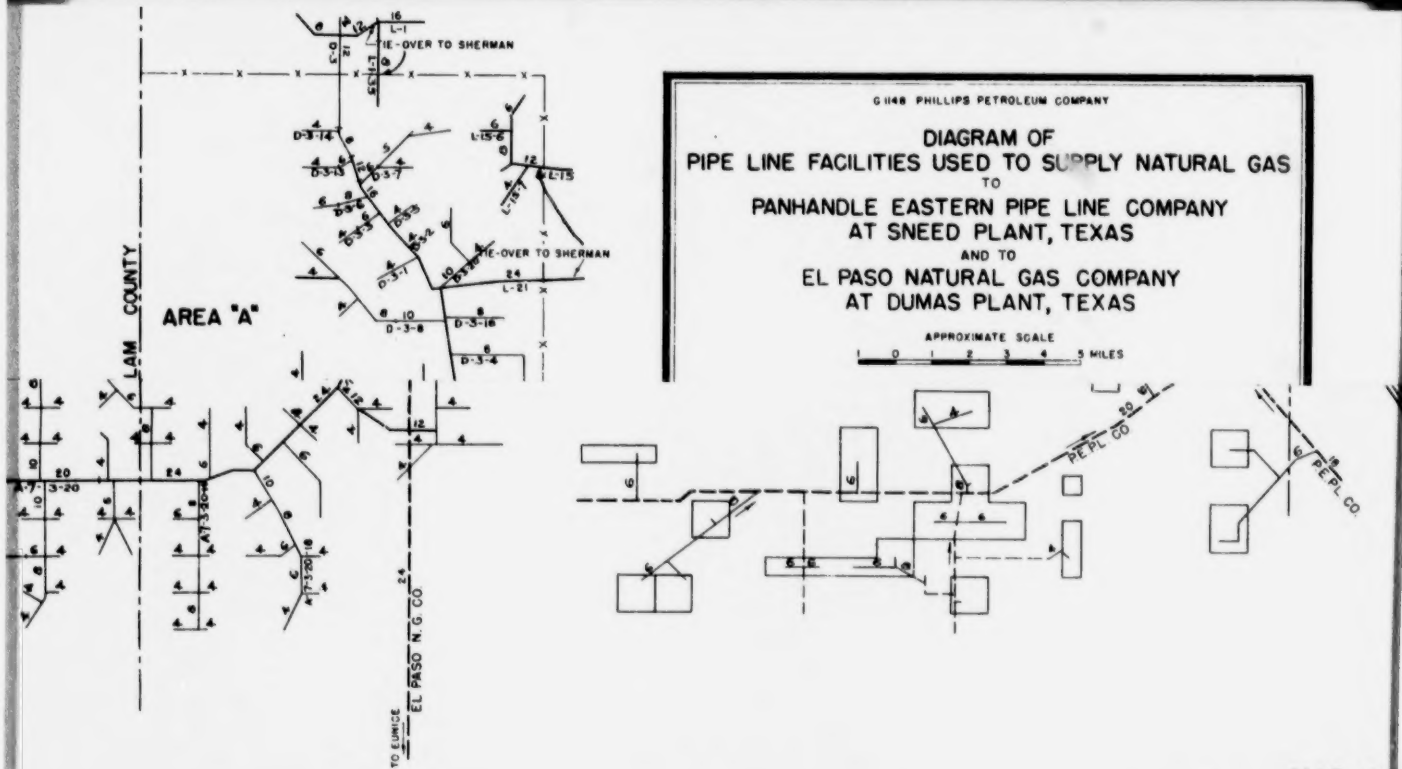
Exhibit No. 14-B

Revision of Exhibit No. 14, which is a diagram of pipe line facilities used to supply natural gas to Panhandle Eastern Pipe Line Company at Sneed Plant, Texas, and to El Paso Natural Gas Company at Dumas Plant, Texas.

BLEED THROUGH

BLURRED COPY

FOLD OUT TO LARGE TO BE FILMED



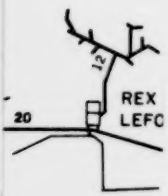
[7182]

Exhibit No. 15-A

Revision of Exhibit No. 15, which is a diagram of pipe line facilities used to supply natural gas to Independent Natural Gas Company and Northern Natural Gas Company.

BLEED THROUGH

BLURRED COPY



FOLD OUT TO LARGE TO BE FILMED

[7189]

Exhibit No. 18

March 14, 1947

Increasing Price of Gas to
Michigan-Wisconsin Pipe Line
Company
File: 2-Ri-133-47

Mr. Geo. P. Bunn
Office

Dear Sir:

Your attention is called to the fact that our contract with Michigan-Wisconsin for the prices of gas per M.C.F. delivered to it by five year periods, are as follows:

First	5¢
Second	5.7¢
Third	6.4¢
Fourth	7.4¢
Fifth	8.4¢
Sixth	9.4¢

No other gas sales contract, to my knowledge, in either the Hugoton or the Panhandle Field provides for a stated price after fifteen years, and the weighted average during the first fifteen years approximates our sales price to Michigan-Wisconsin with the exception of Hagy, Harrington and Marsh with natural gas pipe line company, said prices by five year periods being six, seven, and eight cents per M.C.F. with average of the field thereafter. In other words our contract is the only one which provides a definite price for upward revision after fifteen years, and the inflation clause is based upon an index of wholesale prices of 104. Mr.

BLEED THROUGH

BLURRED COPY

Biddison, Mr. Hiatt, and myself have conferred at considerable length as to the procedure Phillips should follow to get more for its gas than in the Michigan-Wisconsin contract. We conferred briefly with Mr. Emery, and more particularly on the legal phase with Messrs. Hummer and Hudson.

Our discussion is summarized in the memorandum prepared by Mr. Allen B. Hiatt outlined as follows:

1. Need for Michigan-Wisconsin to increase prices paid to Phillips.
2. Reasons for Phillips to get more for its gas.
3. Rights of cancellation and keeping contract in force.
4. Possibility of increasing field prices and city gate rates as necessary without destroying feasibility of project.
5. Result of renegotiating contract to increase price, either with or without the additions of reserves before operation of the line is commenced.
6. Negotiations with producers under Phillips' contract for increases in prices.

[7190]

7. Availability of additional reserves.
8. Possibility of a certificate to Michigan - Wisconsin under a new proceeding before the Federal Power Commission.
9. Wait until pipe line starts operation to renegotiate prices.

10. Contract with Panhandle Eastern.

In order to receive a greater price for gas from our reserves dedicated to Michigan-Wisconsin, three courses are suggested.

1. Dedicate more reserves (Peerless, Cabot and others) to the Michigan-Wisconsin project, obtain consent of four producing companies now under contract to sell gas to Phillips to stay with the project, and hazard the success of a new certificate case with the present commission.

2. Do nothing until it may become apparent that Michigan-Wisconsin cannot meet the gas delivery date east of the Missouri River by January 1, 1949.

3. Approach Panhandle Eastern Pipe Line Company with the suggestion that subject to Phillips not delivering any gas under its contract with Michigan-Wisconsin Pipe Line Company, Phillips will sell negotiated volumes to Panhandle at prices by five year periods of six, seven, eight, nine, and ten cents per M.C.F.

I am of the opinion that top management negotiations between Phillips and Michigan-Wisconsin should be reviewed before making a definite recommendation. However, if it is decided to not pursue my first suggestion, I would recommend that we approach Panhandle Eastern as suggested in 3.

Very truly yours,

ORIGINAL SIGNED BY
A. M. RIPPEL

A. M. Rippel

AMR:as

BLEED THROUGH

BLURRED COPY

cc: Members of Executive Committee
R. F. Hamilton
R. B. F. Hummer (r) H. K. Hudson
W. G. Hiatt
S. S. Learned
B. F. Stradley
Allen B. Hiatt (r) P. McDonald Biddison

[7191]

Mich. Wisc. Gen. Prop. Deals— March 14, 1947

MEMORANDUM

Re: Possibilities of Increasing Price of Gas from Phillips' Acreage Dedicated to Michigan-Wisconsin Pipe Line Company

By Allen B. Hiatt

This matter has been the subject of discussion on numerous occasions by Messrs. Biddison, Rippel, and me, and on one occasion with Mr. Don Emery and on two occasions with Messrs. Hummer and Hudson, of the Legal Department, with Mr. Bunn in attendance at one of the two latter meetings.

Our discussions have developed the following approaches to accomplishment of the objective:

1. Increase price now.
2. Agree with Michigan-Wisconsin now that prices will be increased after the line is placed in operation.
3. Wait until line is placed in operation, then increase prices.

4. Contract now with Panhandle Eastern Pipe Line Company for sale of gas if and in the event the Michigan-Wisconsin project fails to materialize.

Need for Michigan-Wisconsin to Increase Prices Paid to Phillips

1. *To keep contract in force.* Phillips has two possible rights to cancel; (a) if construction is not commenced on or before March 1, 1948, and (b) if acceptance of gas for delivery east of the Missouri River is not commenced on or before January 1, 1949.

2. *To eliminate payment for minimum.* Michigan-Wisconsin is required to take or pay for a minimum of 132,000 Mcf average per day from July 1, 1949 to July 1, 1950, but has until April 1, 1951 to take deficiencies (over required takes at that time) before payment for minimum not taken.

3. *To add reserves.* The present reserves are inadequate for further expansion of their facilities beyond a single line and are believed by some to be inadequate for expansion of the proposed system beyond the initial step. It may be that further examination of the present reserves, in connection with financing, will prove them inadequate for financial stability. The deliverability will not permit full line load beyond possibly twenty years.

4. *To eliminate maximum obligation.* Michigan-Wisconsin is now obligated to take all of their requirements up to 343,000 Mcf per day from Phillips. This will prevent the economic looping of the line since 343,000 Mcf at 100% load factor will have to come from Phillips and only the excess maximum and variations in daily takes over 343,000 Mcf can be taken from another supplier, whose reserves must be obtained to support the looping.

Reasons for Phillips to Get More for its Gas

BLEED THROUGH

BLURRED COPY

Reasons for Phillips to Get More for its Gas

1. *Advanced Field Prices.* The price for gas under recent contracts has materially increased over the prices of December 11, 1945. Royalty rates and rates paid to the four producers are too far out of line with rates now being obtained by other producers and royalty owners. This holds whether reserves to Michigan-Wisconsin are increased or not.

2. *Effect of Adding Reserves.* Additional reserves will bring about lower takes from Phillips and other producer's wells in supplying the same market and this will reduce current income. Spreading the market over a larger area will entail $3,000,000 additional investment for gathering facilities and added gathering cost per unit of volume.

Rights of Cancellation and Keeping Contracts in Force

Under freedom of action by Michigan-Wisconsin the requirement to begin construction by March 1, 1946 appears to be attainable since a compressor station or river crossing, either of which would constitute actual physical construction, could be commenced and built independent of pipe deliveries for the main line. Also the present information on pipe delivery indicates that deliveries may be obtained, commencing in the second quarter of 1948, which would permit the construction of some 500 miles of line required to serve Maryville, Missouri east of the Missouri River by January 1, 1949. If the two above conditions are fulfilled, the requirement to take between July 1, 1949 and July 1, 1950, or pay for on April 1, 1951, an average of 132,000 Mcf per day, does not appear as a handicap to Michigan-Wisconsin.

However, we have been advised by the Legal Department on October 9, 1946 (letter Hudson to Rippel) and in recent discussions that there is a very good probability that the appeal proceedings before the Circuit Court of Appeals and the Supreme Court will not be adjudicated before the fall or latter part of 1948. With favorable speed, however, this matter might be settled by the fall of 1947. In the present status of the proceedings this date is not predictable within the limits set. Should an adjudication by the courts hold up the financing and construction, and should time intervene till it becomes impossible or at least unlikely to obtain final adjudication by July 1, 1948, the probability of Michigan-Wisconsin being able to commence the acceptance of gas east of the Missouri River by January 1, 1949 becomes remote. This fact may be ascertained by the spring of 1948, in which event and at which time Phillips could approach Michigan-Wisconsin and offer relief or Michigan-Wisconsin may approach Phillips and ask for relief. The contract will not face real probability of termination on January 1, 1949 until July 1, 1948.

Possibility of Increasing Field Prices and City Gate Rates as Necessary Without Destroying Feasibility of Project.

Two trial schedules of field prices have been tested against the pipe line earnings. Each of these started at 7¢ @ 14.65 psia or 7.84¢ @ 16.4 psia with one-half cent increases each five year period through the first fifteen years. The first increased 1¢ each five years after fifteen and the second increased only 1/2¢ each five years. These rates permit the establishment of a city gate rate which leaves the project financially sound and the rates

BLEED THROUGH

BLURRED COPY

competitive and in line with those now offered by Panhandle Eastern. The average rates for firm gas delivered in Michigan are 18.85 , 18.22¢, 17.82¢, 17.55¢, and 30.65¢ for the first five years, and if the 27 billion of interruptible is still sold as firm in the 5th year the average rate becomes 21.95¢ for that year instead of 30.65¢. The average present rate of Panhandle for firm gas delivered to the city of Detroit is 22.82¢ per Mcf. The average firm rate of Natural Gas Pipe Line Company is 19.78¢ and of Northern Natural is 23.77¢.

Benefits to Phillips of the two field price schedules described above were set forth in my letter of February 24 (File 1-Ri-42-47).

Result of Renegotiating Contract to Increase Price, Either with or without the Additions of Reserves, Before Operation of the Line is Commenced.

The city gate rates of Michigan-Wisconsin Pipe Line Company proposed to the Federal Power Commission were not approved. The amount of revenue was apparently adequate, but the form of rate was objectionable and the Commission imposed as a condition on Michigan-Wisconsin's certificate the filing of a revised rate schedule. A new city gate rate schedule, embodying a demand charge, which will permit an increase in field prices for gas and under which the pipe line can be financed readily can be devised in such a way as to bring about small increases in revenues and average cost of gas at the city gates in the first five years. This type of rate schedule will produce earnings after five years which would justify a reduction in the city gate rate.

It has been suggested that Michigan-Wisconsin rates be revised and our contract be revised for higher field

prices and that this situation be presented informally to the Federal Power Commission. With the three to two decision on the original certificate it seems unlikely that approval could be obtained in this manner. Even if the Commission had been unanimous in its decision we are advised by the Legal Department that the Commission would not uphold its responsibility to the public in granting approval of such an increase without a hearing since these are factors which governed its findings in the original certificate application hearings. Assuming that approval of the Commission could be obtained informally without hearing, it is the Legal Department's view that knowledge of the increase will be brought to the attention of the court (Circuit and/or Supreme) and inasmuch as this would be an alteration of the facts on which the Commission granted the Certificate the courts would remand the matter to the Commission for further hearing.

It is the view of the Legal Department that any binding commitment by Michigan-Wisconsin, made at any time before the commencement of operation of the pipe line, would bring about a new certificate hearing and a suspension of the present certificate.

Negotiations with Producers under Phillips' Contract for Increases in Prices

Should it be desired to renegotiate at this time with Michigan-Wisconsin for increased prices we should have the producers along with us since a new contract will result in a new hearing and revoking of the certificate now issued. The Legal Department advise that to approach the producers at this time with a view to getting higher prices for our gas and their gas will neither place

BLEED THROUGH

BLURRED COPY

liability on Phillips nor jeopardize our position with respect to the present contracts.

Availability of Additional Reserves

The Peerless Oil and Gas Company have approximately 87,320 acres adjacent to our acreage in Texas County, Oklahoma, which constitute a reserve of 0.683 trillion cubic feet. This gas is now under contract to Mid-Continent Gas Transmission Company, which is controlled by Peerless and which is now prosecuting an application before the Federal Power Commission. They probably would welcome the opportunity to drop this project and go along with us.

Cabot Carbon Company has approximately 17,760 acres in Texas County, which constitute a reserve of approximately 0.136 trillion cubic feet. This gas is now going to a channel carbon black plant, the future of which is not certain. They may be induced to go along with us.

There is sufficient acreage owned by miscellaneous operators interspersed in the Peerless-Cabot area so that a total of 1 trillion cubic feet of additional reserves could be obtained.

These companies have not been approached relative to this matter. With the acreage now under contract and the above described acreage, Phillips could offer Michigan-Wisconsin a reserve of 5 trillion cubic feet.

If Michigan-Wisconsin is ever to obtain additional reserves in the Hugoton Field it should do it now since the uncontracted acreage in this field is rapidly becoming nonexistent.

Possibility of a Certificate to Michigan-Wisconsin Under a New Proceeding Before the Federal Power Commission

Panhandle Eastern at the time of the Michigan-Wisconsin hearing was offering to expand its facilities and to furnish the same service to Michigan as was Michigan-Wisconsin. Panhandle Eastern, on March 5, 1947, filed a certificate application with the Federal Power Commission requesting authority to construct and operate the second portion of their third line. Any rehearing of Michigan-Wisconsin's application would more than likely be consolidated with Panhandle Eastern's new application and Panhandle might even amend their present application to provide for the complete third line. All of this would undoubtedly lessen the comparative showing to be made by Michigan-Wisconsin.

Wait Until Pipe Line Starts Operation to Renegotiate Prices

It was agreed by those in session that the only way to proceed on a price increase without jeopardizing Michigan-Wisconsin's certificate was to wait until the line was in operation. However, the increase would then depend upon approval of the price by the Federal Power Commission as far as inclusion as an allowable expense in setting Michigan-Wisconsin's rates and as far as any increase in Michigan-Wisconsin's rates would be required. This course of action does not provide added reserves for Michigan-Wisconsin at this time, and

[7195]

it is not at all certain that such reserves would be available after Michigan-Wisconsin commences operation.

Contract with Panhandle Eastern

The Legal Department has expressed the opinion that so long as everything is open and above board we could

BLEED THROUGH

BLURRED COPY

contract at this time with Panhandle Eastern for the sale of gas from our acreage after and in the event that the Michigan-Wisconsin project fails to materialize. It is felt, however, that such action would almost certainly in itself kill the Michigan-Wisconsin project. Thus if we could contract with Panhandle Eastern for higher prices than under the Michigan-Wisconsin contract and also improve some of our other contracts with Panhandle, this course has considerable merit, particularly if there is any indication that Michigan-Wisconsin will not be able to go forward anyway.

[7196]

Exhibit No. 19

[*Note: This exhibit was rejected by the Examiner at record 2355 and was not received in evidence. An offer of proof was made on page 2357-58 of the record by the State of Wisconsin and the Public Service Commission of Wisconsin. The Attachments are omitted.*]

cc: F. E. Rice
C. W. Binckley
G. P. Bunn
O. F. Grover
H. H. Jones
H. R. Legatski
W. F. Matheny
D. L. Mayer
G. W. McCullough
A. F. Roth
R. B. Stewart
L. G. Wienecke

A. B. HIATT

February 2, 1946

Financial Analysis of
Michigan-Wisconsin Pipe
Line Company.
File: 1-Te-190-46

Mr. A. M. Rippel
Office

Dear Sir:

We have completed a financial analysis of the proposed sale of residue gas from the Hugoton Field in Dallas, Sherman and Hansford Counties, Texas, and Texas County, Oklahoma, to Michigan-Wisconsin Pipe Line Company.

Information used in this analysis was obtained from members of the Gas Division, Process and Design Section, Gasoline Construction Section, Production Department, Tax, Insurance and Claims Department, Comptroller's Department, Economics Department and others.

Premises for this study were as follows:

1. *Volume of Residue Sale.* Initial residue sale of 142,100 MCFD at 14.735 in 1948, increasing to 314,600 MCFD maximum in 1952. Maximum delivery for any 24 hours, 343 million cubic feet.

2. *Source of Gas.*

Phillips:	445,880	acres in Dallas, Sherman and Hansford Counties, Texas and Texas County, Oklahoma.
Purchased Gas From:		
Magnolia Petroleum Company	25,000	acres in Sherman and Hansford Counties Texas.
Skelly Oil Company	46,548	acres in Sherman and Hansford Counties, Texas.

BLEED THROUGH

BLURRED COPY

Stanolind Oil and Gas Company	118,000	acres in Sherman and Hansford Counties, Texas.
United Producing Company	12,280	acres in Sherman County, Texas.

[7197]

Mr. A. M. Rippel

Page 2
1-Te-190-46

3. *Reserves.* Reserves from Phillips' acreage plus acreage supporting purchased gas, 4.109 trillion cubic feet at 14.735 psia.

4. *Price of Residue Gas.* The residue sales price to Michigan-Wisconsin Pipe Line Company is as follows:

* 1st 5-year period.....5¢/MCF @ 16.4 psia.
2nd 5-year period.....5.7¢/MCF.
3rd 5-year period.....6.4¢/MCF.
** 4th 5-year period.....7.4¢/MCF.
** 5th 5-year period.....8.4¢/MCF.
** 6th 5-year period.....9.4¢/MCF.

* After the time of first delivery of gas.

** Contract calls for these prices or the weighted average price, considering pressure, being paid for gas sold and delivered to all gas transmission companies from the Panhandle Field and the Hugoton Field. (Above prices were used.)

5. *Price of Gasoline.* 26-70 priced at 3.0¢/gallon and excess butanes at 2.0¢ per gallon.

6. *Well Drilling Costs.* Well drilling costs estimated at $31,000, of which $4,600 was the tangible cost.

7. *Gasoline Plant and Treater Operating Expenses.* These expenses were estimated based on the plant and treater for Michigan-Wisconsin being located in the same plant yard with the present Hansford Plant.

8. *Payment to Michigan-Wisconsin Pipe Line Company for Boosting Shrinkage Volume.* Gasoline plant constructed and operated to receive gas from Michigan-Wisconsin's compressor station at the operating pressure of the pipe line not to exceed 925 psig. Payment made to Michigan-Wisconsin Pipe Line Company for boosting the shrinkage volume at 1¢ per MCF.

9. *Royalty.* Royalty payments were estimated at 1/8 of value of gas at wellheads, except on gas production from Bivins Ranch lease and acreage obtained from Cabot. Bivins Ranch royalty was estimated at 1/8 of the sales value of the gas with a minimum of 3/4¢ per thousand, plus 1/16 of the gross value of the liquid products sold. An overriding royalty on the gas produced from the Cabot acreage of 1/4 of 7/8 was used.

   Value of gas at wellhead for royalty purposes was evaluated using Michigan-Wisconsin sales prices.

10. *Gross Production Tax.*

1948-49	5.2% of gross working interest income to Phillips.
1950-55	10.0% of gross working interest income to Phillips.
1956-77	17.5% of gross working interest income to Phillips.

BLEED THROUGH

BLURRED COPY

Gross working interest income arrived at by evaluating gas at mouth of well at prices which Phillips is to pay outside companies for gas as set forth in the Michigan-Wisconsin Contract purchase exhibits, less royalty as previously outlined.

11. *Ad Valorem Tax.* Ad valorem tax on leases was estimated at $1,000 per year per well when the daily average gas sales per well was 1,000 MCF or more. When the average sale was less than 1,000 MCFD per well, $1.00 per year per MCFD was used.

12. *Federal Income Tax.* Federal Income tax estimated to be as follows:

1948	35%
1949-53	30%
1954-77	20%

13. *Depletion of Leasehold.* On unit of production basis. Gross working interest income at wellhead evaluated at prices which Phillips is to pay outside companies for gas as set forth in the Michigan-Wisconsin contract purchase exhibits, less royalty as previously outlined.

14. *Depreciation.* The gasoline plant and treater was depreciated on a 30-year basis with 6% net salvage value, gathering system on a 30-year basis with 10% salvage value, tangible well equipment on unit of production basis, and booster stations on 20-year rate at 20% salvage.

Attached are seven schedules showing the following:*

Schedule I	Investment.
Schedule II	Annual Gross Income.
Schedule III	Operating Expense and Operating Income.
Schedule IV	Tax Deductions, Federal Income Tax, and Operating Income after Federal Income Tax.
Schedule V	Years to Payout and Average Annual Rate of Return.
Schedule VI (A & B)	Comparison of Michigan-Wisconsin Gas Deal vs. American Gas Deal.

The comparison between the Michigan-Wisconsin Deal and American Gas Deal is not presented to indicate that a choice may be made between the two deals, but is presented merely for information concerning the similarity of the projects.

Very truly yours,

ROY M. TEEL
Roy M. Teel

MWB:RMT:dw
Enclosures-7

*[Note: Schedules, R-7199–7205, are omitted]

BLEED THROUGH
BLURRED COPY

[7206]

Exhibit No. 20

[Note: This exhibit was rejected by the Examiner at record 2355 and not received in evidence. An offer of proof was made on page 2357-58 of the record by the State of Wisconsin and the Public Service Commission of Wisconsin. The attachments are omitted.]

August 20, 1948

Earnings from Sales of Gas to Michigan-Wisconsin Pipe Line Company.

File: 1-Hi-201-48

Mr. Leroy Culbertson
Office

Dear Sir:

On August 9, 1948, Phillips Petroleum Company entered into an agreement with Michigan-Wisconsin Pipe Line Company amending a contract between the respective companies dated December 11, 1945, as heretofore amended, bringing about certain changes, including the following:

1. Extension of date by which Michigan-Wisconsin must begin receipt of gas from Phillips from January 1, 1949 to July 1, 1949;
2. Deferring the minimum purchase obligations for a period of six months;
3. Changing the base prices in the contract to 7½¢ per Mcf during the first five years, increasing 1¢ per Mcf for each five years; and

4. Provide for escalation in proportion to the increase in Michigan-Wisconsin Pipe Line Company's sales rates in excess of 140% of the rates originally provided in their sales contracts with distributing companies.

In order to evaluate this amendment our division has prepared figures based on our estimates as to the commencement of receipts of gas by Michigan-Wisconsin, the volumes to be taken during various periods of time, and the number of wells to be drilled in order to supply Michigan-Wisconsin Pipe Line Company's requirements. On February 2, 1946, file 1-Te-190-46, shortly after execution of the original contract with Michigan-Wisconsin Pipe Line Company, Mr. Teel submitted to Mr. Rippel a financial analysis of the Michigan-Wisconsin Pipe Line Company project, which reflected an ultimate 30-year investment of $44,544,800 and a net operating income, after depreciation and taxes, of $67,-241,700. Since that date, due to the increased costs of labor and materials we estimate that our investment will be $59,382,000 and our net income, assuming the same product prices without escalation of the gas prices, will be $58,651,-551. Thus on the basis of these figures our net income would have decreased by $8,590,200; however, we believe it is reasonable to assume that a conservative expectation of liquid product prices for the next thirty years will be more nearly 6¢ per gallon for 26-70 gasoline and 3½¢ per gallon for LPG products rather than the 3¢ and 2¢ used in the study of February, 1946. Using these new liquid product prices we

BLEED THROUGH

BLURRED COPY

obtain an additional net income of $35,180,000 which would more than offset the deficit of $8,590,000. While the average sales rates of Michigan-Wisconsin Pipe Line Company, on which escalation of our gas prices is to be based, are unascertainable at this time we estimate that the rates which they initially put into effect will be 158% of those in their original gas sales contracts and, on the basis of this estimated escalation, the escalation of our gas prices as provided in the contract prior to the recent amendment would have produced an additional net income of $53,690,500. The August 9 amendment further increases the net income received by reason of escalated gas prices an additional $3,125,000 if the annual index of wholesale prices of all commodies remains in excess of 134 points based on 1926 prices at 100 points and if 26-70 and LPG prices remain in the range of 6¢ and 3½¢ it appears we will have an increased net income of $91,995,800 by reason of the escalation and increased gasoline market which will exceed our loss due to increased investment and operating expenses by some $83,405,600.

The August 9 amendment appears to have a net income value compared to the contract prior to amendment of $3,125,300 with 158% escalation and $53,541,909 with no escalation over a 30-year life.

The average annual rate of return as reflected by your February, 1946 study was 10.75%. The average annual rate of return before August 9 amendment, assuming no increase in liquid product value and no escalation on gas prices, had declined to 9.5% because of our increased investment and operating expenses and assuming 6¢ for 26-70 and 3½¢ for LPG and prices escalated 158% the average annual rate of return is 13.01%. After the August 9 amendment, assuming 26-70 price of 6¢, LPG at 3½¢, and 158% escalation in the Michigan-Wisconsin Pipe Line Company's rates the average annual rate of return appears to be 13.76%.

In order that this department may advise the Operating and Executive Committees of the value of the August 9 amendment to Phillips Petroleum Company, I would appreciate your reviewing the computations by this division and verifying the reasonableness of our assumptions with regard to liquid products, operating expenses, and investment.

Very truly yours,
/s/ ALLAN B. HIATT
Allan B. Hiatt.

ABH:d

cc: F. E. Rice
G. P. Bunn
A. M. Rippel
Dan L. Mayer
D. F. Mayfield
R. M. Teel

[Note: Work sheets, R. 7208-7215 omitted.]

[7216]

Exhibit No. 21

[Note: This exhibit was rejected by the Examiner at record 2355 and not received in evidence. An offer of proof was made on page 2357-58 of the record by the State of Wisconsin and the Public Service Commission of Wisconsin.]

MINUTES OF ADJOURNED REGULAR MEETING
OF BOARD OF DIRECTORS OF
PHILLIPS PETROLEUM COMPANY

September 27, 1948

An adjourned regular meeting of the Board of Directors of Phillips Petroleum Company was held at the Bankers

BLEED THROUGH
BLURRED COPY

Club, 120 Broadway, New York, New York, at 12:30 p. m. Eastern Standard Time on the 27th day of September, 1948.

The following Directors, constituting a quorum, were present:

Mr. Frank Phillips
Mr. K. S. Adams
Mr. H.M. Addinsell
Mr. F. W. Begrisch
Mr. E. E. duPont
Mr. J. L. Johnston
Mr. Ch. A. Lemp
Mr. Don Emery

Mr. R. C. Jopling and W. G. Angel also were in attendance.

Mr. Frank Phillips, Chairman, presided as Chairman, and Mr. B. F. Stradley, Secretary, recorded the minutes of the meeting.

The minutes of a regular meeting of the Board of Directors held on September 13, 1948 in Bartlesville, Oklahoma, were reviewed, and, on motion of Mr. J. L. Johnston, seconded by Mr. H. M. Addinsell, were unanimously approved. Resume of said minutes is included herein as a part of these minutes as follows:

[7217]

As a matter of information, the President reported on the results of negotiation of an amendment to the Gas Sales Contract with Michigan Wisconsin Pipe Line Company, explaining that the price of gas had been raised from 5¢ to 8-1/2¢ per thousand cubic feet, with a 1¢ increase

[7218]

per thousand cubic feet each five years, together with an escalation clause. Additional acreage in the Panhandle gas field, comprising 40,000 to 50,000 acres have been dedicated under the contract, and present estimates indicate these price increases will result in increased income to the Company of between $15,000,000 and $20,000,000 over the life of the contract.

[7266]

Exhibit No. 28

PROSPECTUS

1,007,517 Shares

PHILLIPS PETROLEUM COMPANY

Common Stock

(No Par Value)

These securities have not been approved or disapproved by the Securities and Exchange Commission nor has the Commission passed upon the accuracy or adequacy of this Prospectus. Any representation to the contrary is a criminal offense.

As more fully set forth under "Offering to Stockholders" herein, the Company is issuing to its Common Stockholders of record at the close of business on November 18, 1947, transferable Subscription Warrants (herein called

BLEED THROUGH

BLURRED COPY

the "Subscription Warrants") entitling the holders thereof to subscribe, at $49.00 per share, prior to 3:00 P. M. (Eastern Standard Time) on December 3, 1947, for the Common Stock offered hereby at the rate of one share of such stock for each five shares of Common Stock held of record on such record date.

	Price to Public (1)	*Underwriting Discounts or Commissions (2)*	*Proceeds to Company (3)*
Per Unit..	$49.00	$1.1025	$47.8975
Total.....	$49,368,333	$1,110,787	$48,257,546

(1) The Price to Public stated above is the price payable upon exercise of Subscription Warrants.

(2) Under the terms and conditions of the Underwriting Agreement described herein, the several Underwriters named herein have agreed to purchase from the Company, at the Price to Public set forth above, such of the shares of Common Stock offered to Stockholders as are not purchased upon exercise of Subscription Warrants. As compensation for said underwriting, the Company has agreed to pay the Underwriters an aggregate amount equal to $1.1025 per share in respect of the entire number of shares so offered to Stockholders. As a result of transactions set forth below the several Underwriters may realize profits or losses independent of the underwriting commissions stated above. Reference is also made to "Underwriting" herein for information with respect to certain indemnification agreements between the Company and the several Underwriters.

(3) The Proceeds to Company are stated before deduction of expenses payable by the Company estimated at $310,000.

Prior to the expiration of the Subscription Warrants, the several Underwriters may offer and sell shares of the unsubscribed Common Stock and of Common Stock purchased or to be purchased by them through the exercise of Warrants, either firm or subject to subscription through the exercise of Subscription Warrants, at a price which may vary each 24-hour period commencing 3:00 P. M., Eastern Standard Time, on November 18, 1947, but which it is intended shall not vary within any such 24-hour period. Such price shall not be less than the Price to Public set forth above nor more than the last sale price of the Common Stock on the New York Stock Exchange in the last preceding 24-hour period in which the Common Stock was sold on said Exchange. After the expiration of the Subscription Warrants, the several Underwriters may or may not, as they may determine, make one or more public offerings of shares of the unsubscribed Common Stock and of Common Stock purchased by them through the exercise of Subscription Warrant. The price or prices of any such offerings have not been fixed as of the effective date of the Registration Statement but will be determined as set forth under "Offering by Underwriters". With respect to such sales by the Underwriters, the Underwriters may realize profits or losses independent of the underwriting commissions stated above, such profits or losses being dependent upon the number of shares acquired by them and the prices at which such shares are sold by them.

THE FIRST BOSTON CORPORATION

In connection with this offering, the Underwriters may effect transactions which stabilize or maintain the market price of the common stock and the subscription warrants of

BLEED THROUGH

BLURRED COPY

the Company at a level above that which might otherwise prevail in the open market. Such transactions may be effected on the New York Stock Exchange and the San Francisco Stock Exchange and in respect of common stock in the over-the-counter market. Such stabilizing, if commenced, may be discontinued at any time. See also "Offering by Underwriters" herein.

The date of issue of this Prospectus is November 18, 1947.

3-1

[7267]

CONCERNING THE REGISTRATION STATEMENT

Phillips Petroleum Company (herein sometimes called the "Company") has filed with the Securities and Exchange Commission, Philadelphia, Pa., a Registration Statement under the Securities Act of 1933 with respect to shares of Common Stock offered hereby. This Prospectus omits certain information contained in the Registration Statement on file with the Securities and Exchange Commission. The information omitted may be obtained from the Commission's principal office at Philadelphia, Pa., upon payment of the fee prescribed by the rules and regulations of the Commission.

3-2

[7268]

BUSINESS

The business conducted by the Company and the integrated character thereof includes the following:

3-3

[7269]

(2) The gathering by pipe line and the transportation by pipe line, tank cars, motor trucks and water transport of crude oil, distillate, natural gas, natural gasoline and other natural gas liquids, produced or purchased, for processing and/or delivery to others.

3-4

[7270]

DEPARTMENTAL OPERATIONS AND DEVELOPMENT

3-5

[7271]

NATURAL GAS AND GASOLINE

The major outlets for natural gas sold by the Company are sales to natural gas pipe line companies and to operators of carbon black plants located near the Company's supplies of such gas. In order to place its natural gas supplies in long term, higher priced markets the Company has negotiated sales contracts with major natural gas pipe line companies including Northern Natural Gas Company, El Paso Natural Gas Company, Panhandle Eastern Pipe Line Company, Cities Service Gas Company and United Gas Pipe Line Company for long terms and at contract prices which start at levels higher than the prices previously received from carbon black manufacturers and most of which increase at intervals in the future. Deliveries are presently being made under all of the above-mentioned contracts, with the exception of one contract with El Paso Natural Gas Company, under which deliveries are

BLEED THROUGH

BLURRED COPY

expected to commence within a few months, and which will provide a long term outlet for natural gas from the "Permian Basin Area" of Southwestern Texas and Southeastern

3-6

[7272]

New Mexico where much residue gas from casinghead gas had been vented to the air. The Company has also entered into a sales contract with Michigan-Wisconsin Pipe Line Company providing for the sale of natural gas from an area in the Hugoton Field of Texas and Oklahoma which has been partially developed by the Company but from which little gas has been marketed. The performance of this contract is dependent upon the construction by Michigan-Wisconsin Pipe Line Company of its proposed pipe line, a conditional certificate covering which has been issued by the Federal Power Commission.

3-7

[7273]

GOVERNMENTAL REGULATION

Reference is made to the subheading "Natural Gas and Natural Gasoline Operations" herein relative to markets for gas sold by the Company and prices received for such gas, and reference is also made to contract for the sale of natural gas included in the contracts,

3-8

[7274]

copies of which are incorporated herein as Exhibit 15 hereto. Of the volume of 990,000,000 cubic feet of natural gas

per day being sold by the Company at the end of 1946 and the daily average volume of 1,100,000,000 cubic feet of natural gas expected to be sold during the calendar year 1947, approximately thirty per cent was and will be sold to purchasers which transport and sell the gas in interstate commerce; and it is anticipated that, during the next few years, increasingly greater proportions of the total volumes of gas sold by the Company and its subsidiaries will be sold to purchasers which transport and sell the gas in interstate commerce. Although such sales and the transportation of natural gas antecedent thereto constitute operations by the Company as a "natural gas company" under the Natural Gas Act, and, as such, are subject to the Federal Power Commission's jurisdiction, unless the exercise of such jurisdiction constitutes an interference with state regulation of production and gathering, the Commission with Commissioner Draper dissenting in a declaration made on the 15th day of August, 1947, disclaimed the intention to exercise jurisdiction over such sales if made at arm's length, that is, sales made as an incident to the producing or gathering operation by a producer or gatherer of gas to a non-affiliate (Order No. 139, Docket No. R-106). The House of Representatives of the 80th Congress passed a Bill denying rate regulatory jurisdiction to the Federal Power Commission over such sales. In the Senate the Bill is now pending upon hearings before the Committee on Interstate and Foreign Commerce.

3-9

BLEED THROUGH

BLURRED COPY

[7275]

PHILLIPS PETROLEUM COMPANY

K. S. ADAMS
President.

3-10

[7277]

Exhibit No. 29

HISTORY AND BUSINESS

Since Phillips Petroleum Company and its subsidiary companies are primarily operating companies, the word "Company" is used in this Prospectus to include Phillips Petroleum Company and its subsidiaries consolidated except where otherwise indicated. Phillips Petroleum Company has only three unconsolidated subsidiaries. These are not considered of material importance in comparison with total assets and business of the Company.

Phillips Petroleum Company, which was founded by Frank Phillips and L. E. Phillips, was incorporated in Delaware on June 13, 1917. Its principal executive offices are located at 80 Broadway, New York 5, N. Y., and Phillips Building, Bartlesville, Oklahoma.

As presently constituted, the Company comprises one of the larger integrated units in the petroleum industry, owning in the United States: reserves of crude oil, distillate, natural gas, and natural gasoline and other natural gas liquids, in a large number of fields in the Mid-Continent, Illinois, West Texas and New Mexico, Rocky Mountain,

and Gulf Coast areas; natural gasoline plants, crude oil refineries, chemical plants and furnace carbon black plants; crude oil pipe lines and refined product pipe lines; and marketing outlets throughout the Central United States, the Rocky Mountain area and adjacent areas. The Company also owns crude oil reserves in Venezuela, and owns oil and gas leases in Canada where it is now conducting exploratory operations. Based on total consolidated balance sheet assets as of December 31, 1949, the Company ranked ninth among United States oil companies. The integrated business conducted by the Company is described in more detail below:

(1) The acquisition and development of prospective and proved oil and gas leases and lands, and the production and purchase of crude oil, distillates, natural gasoline, natural gas and other derivatives thereof. Such activities are carried on chiefly in the Mid-Continent, West Texas and New Mexico, Rocky Mountain, and Gulf Coast areas of the United States. In recent years oil and gas exploratory and development activities have been extended to certain foreign countries.

(2) The gathering by pipe line and the transportation by pipe line, tank cars, motor trucks, and water transport of crude oil, distillate, natural gasoline and other natural gas liquids, and refined products.

(3) The refining of crude oil and distillate for the production of refined products, including aviation and motor gasoline, automotive and industrial lublicating

BLEED THROUGH

BLURRED COPY

oils and greases, kerosene, household heating oils, diesel fuels and residual fuel oil.

(4) The processing of natural gas for the production of natural gasoline and other natural gas liquids, including the treatment necessary to prepare the natural gas for sale to pipe lines of other companies which transport and distribute natural gas to industrial and household consumer markets.

(5) The production and sale of numerous petroleum chemicals. These consist in part of anhydrous ammonia and nitrogenous fertilizers, including ammonium nitrate, ammonium sulfate, and ammonia solutions; furnace carbon blacks made from oil and sold under the trade names, "Philblack A" and "Philblack O"; pure hydrocarbons for anti-knock reference standards; research grade hydrocarbons; solvents; organic sulfur chemicals; and other specialty chemical products. The Company also produces and sells to the Government butadiene, an ingredient of synthetic rubber.

(6) The marketing of crude oil, natural gas, distillate, and the products thereof, tires and automotive accessories and certain other non-petroleum merchandise. The Company is domesticated in all forty-eight states and the District of Columbia, in substantially all of which some of its products are

[7278]

distributed or shipped for sale or for export. To a large extent sales of gasoline and other petroleum products

are made under the Company's trade names, the most important of which is "Phillips 66."

A substantial part of the crude oil, distillate and natural gas produced and purchased by the Company is gathered through its own pipe lines for its own refineries and gasoline plants, and a substantial portion of the Company's natural gasoline, natural gas liquids and refined gasolines is transported through its own and other pipe lines to its own and other terminals throughout its marketing territory.

The principal sources of gross operating revenue for the year 1949 were: refined petroleum products 48.9%; crude oil 24.3%; natural gas liquids 6.7%; aviation gasoline 3.9%; natural gas 4.2%; fertilizer 2.3%; furnace black 2.2%; non-petroleum merchandise 2.7%; and other sales and services 4.8%. The relative contributions of these various sources of revenue to the consolidated net income of the Company bear little or no relation to the breakdown of gross operating revenues in any year. It is estimated, for instance, that the percentage of net income from "natural gas" during 1949 was greater (possibly two or three times) than its percentage of gross operating revenue stated above. Such relative contributions also vary widely from year to year. Such variations result, among many other factors, from changes in sales volume of various products and from fluctuations in prices of raw materials and products and in the relationships existing among such prices. For example, although posted prices for crude oil in the Mid-Continent area have been generally unchanged over the past two years, there have been major increases and/or decreases

BLEED THROUGH

BLURRED COPY

in the selling prices of petroleum products over that period, all of which have resulted in relative changes in the Company's profits from the various phases of its integrated operations.

During the past five years, numerous properties, leases and interests in production have been acquired; oil and gas properties have been developed; transportation facilities have been augmented; refining operations have been increased; and natural gas operations have been greatly expanded. During 1947 producing, refining and marketing operations and properties in the Rocky Mountain area were increased through the acquisition of several companies which have since been liquidated and their assets transferred to the parent company. In December, 1945, properties comprising thirteen liquefied petroleum gas retail districts on the Atlantic Seaboard, which are outside the Central United States marketing territory of the Company, were sold to Surburban Propane Gas Corporation. The Company has a long-term contract to supply liquefied petroleum gas to the purchaser. In the ordinary course of business certain unprofitable oil and gas wells have been abandoned, and non-producing acreage released where the prospects of production appeared remote, and certain other facilities have been retired.

Capital expenditures made during the past five years were as follows: 1945, $61,200,000; 1946, $48,100,000; 1947, $87,900,000; 1948, $139,000,000; 1949, $89,000,000; totalling $425,200,000. The aggregate of such capital expenditures is classified by major activities as follows: oil and gas prop-

erties and wells 57.3%; manufacturing 27.7%; transportation 6%; marketing 4%; and miscellaneous 5%.

DOMESTIC OIL AND GAS PRODUCTION. Production, purchases and sales of crude oil, stated in barrels*, were as follows:

	Gross Production	Net Production	Purchases from Others	Sales to Others	Available for Refining or Storage
1945	59,075,161	34,222,927	30,820,791	38,722,394	26,321,324
1946	58,701,251	33,542,092	29,810,791	35,108,403	28,244,480
1947	65,153,132	34,740,758	28,867,807	30,045,097	33,563,468
1948	81,627,696	39,880,964	49,834,599	34,804,617	54,910,946
1949	83,348,448	35,314,186	54,936,662	43,243,215	47,007,633

* Barrels wherever used in this Prospectus refer to barrels of 42 gallons each.

[7279]

In the foregoing tabulation, gross production includes the total production from properties in which the Company had a working interest. Net production is gross production adjusted for outside interests such as partnerships and royalties. The oil purchased from others consists of royalty oil and other interests, some of which are included in gross production shown above, oil purchased under contract and oil bought subject to cancellation by the seller.

The average daily net domestic production of crude oil for the year 1949 was approximately 96,750 barrels as compared with 109,000 in 1948. This reflects the effect of lower crude oil production allowables which prevailed in most of the oil producing states during the year 1949, particularly in the State of Texas where a large portion of the Company's production is located. Approximately 90% of the Company's domestic production originates in states which curtailed allowable production during 1949.

BLEED THROUGH

BLURRED COPY

The Company consistently follows the practice of expanding its oil and gas reserves through acquisition of new properties, development of existing properties and carrying out secondary recovery operations such as gas repressuring and water flooding. In recent years the Company has made important exploratory discoveries and field extensions, principally in Oklahoma, Texas, Wyoming, Louisiana, Kansas, New Mexico, Colorado, Mississippi and Illinois. In 1949 the Company and the other leasehold owners formed the North Burbank Unit, embracing 22,000 acres of producing oil properties in Osage County, Oklahoma. This Unit, in which the Company owns a 53.52% interest, will be the largest water flooding operation ever undertaken.

[7280]

NATURAL GAS AND NATURAL GASOLINE. The approximate total volumes of natural gas produced from the Company's acreage (including the Company's interest in natural gas processed in cycling plants) and purchased from others during the past five years expressed in Mcf (thousand cubic feet) were as follows:

Year	*Net Gas Produced*	*Gas Purchased**	*Total Gas Volume*
1945.....	248,000,000	257,000,000	505,000,000
1946.....	270.000,000	270,000,000	540,000,000
1947.....	274,000,000	266,000,000	540,000,000
1948.....	276,000,000	268,000,000	544,000,000
1949.....	282,000,000	276,000,000	558,000,000

* Purchased royalty and partnership interests are included herein. Figures do not include certain relatively small quantities purchased from others and used principally for fuel.

The Company, which for years has been one of the largest processors of natural gas, improved its existing facilities and constructed new facilities during the past five years to increase its productive capacity

[7281]

and operating efficiency. The volume of natural gas processed and the volumes of various natural gas liquids produced or purchased were as follows:

Year	Gas Processed (a) (Mcf) (1)	Approximate Productions (b) Gallons: Natural Gasoline (26-70 Equivalent) (2)	Approximate Productions (b) Gallons: Other Natural Gas Liquids (3)	Purchases of Products Withdrawn from "Controlled" Reserves (Gallons) (c) (4)
1945	456,000,000	367,000,000	174,000,000	175,000,000
1946	486,000,000	367,000,000	200,000,000	189,000,000
1947	477,000,000	358,000,000	204,000,000	196,000,000
1948	494,000,000	381,000,000	222,000,000	238,000,000
1949	465,000,000	391,000,000	226,000,000	243,000,000

(a) Includes, in addition to Company-owned gas, that portion of gas owned by others from which liquids were extracted by the Company and retained as a processing fee.

(b) Includes, in addition to the liquids produced from Company-owned gas, liquids extracted from gas owned by others and retained as a processing fee. Most of the remaining liquids extracted from gas owned by others are purchased by the Company as produced, and included in column 4.

(c) For definition of "controlled" reserves, see "Reserves" herein.

The natural gasoline and other natural gas liquids extracted from natural gas, together with similar products purchased from other processors, are used by the Company as raw materials and as blending ingredients in the manufacture of motor fuels, aviation fuels, butadiene, liquefied petroleum gas and many other products used or sold.

BLEED THROUGH

BLURRED COPY

The approximate total volume of natural gas sold annually by the Company (not including gas used by the Company) has increased from 289 billion cubic feet in 1945 to 418 billion cubic feet in 1949. This increase has resulted largely from increased sales to gas pipe lines, certain of which have been constructed during this period. The Company has long-term sales contracts (most of which contain escalator price clauses as to future deliveries) with several major gas pipe line companies. Contract sales to pipe lines during 1950 are expected to approximate 375 billion cubic feet.

Gas volumes stated under this subcaption for the years 1945 through 1948 are on various pressure bases ranging from 13.45 to 16.7 p.s.i.a. The volumes for 1949 and 1950 are on a pressure base of 14.65 p.s.i.a.

CYCLING OPERATIONS. The Company has partial interests in three cycling plants, located in Louisiana and Texas, which process natural gas supplied by the Company and the other owners. The Company's interest in the volumes of gas processed in these plants and the natural gas liquids recovered therefrom has been as follows, such amounts being in addition to those appearing in the second table under the sub-heading "Natural Gas and Natural Gasoline":

	1945	1946	1947	1948	1949
Gas Processed (Mcf)	12,944,000	13,931,000	14,938,000	14,610,000	14,949,000
Production of Natural Gas Liquids (Gals.)	40,329,000	40,726,000	40,614,000	37,684,000	35,939,000

RESERVES

The following statement of estimates of the Company's reserves of crude oil, distillate, natural gasoline and other natural gas liquids, and natural gas is made upon the authority of an expert, namely, K. E. Beall, a Vice President and Head of the Economics Department of the Company.

March 22, 1950

Board of Directors
Phillips Petroleum Company
Bartlesville, Oklahoma

Gentlemen:

The following are estimates of owned or controlled, proved reserves of Phillips Petroleum Company and Subsidiaries, with which I agree, made under my supervision by Company Engineers.

"Owned reserves", as used herein, are reserves the legal title to which, in the opinion of the Legal Department of the Company, is vested in the Company or vest in the Company upon and by virtue of their lawful production by the Company.

"Controlled reserves", as used herein, are (a) royalty crude oil reserves not "owned" by the Company but producible and customarily sold with "owned reserves", and (b) other reserves of crude oil and reserves of distillate, natural gasoline and other natural gas liquids and natural gas which, in the opinion of

BLEED THROUGH

BLURRED COPY

the Legal Department of the Company are not owned by the Company, as above defined, but which by contract or grant are subject to the Company's purchase and disposition or utilization upon lawful production and delivery by or for another; excluding, however, volumes of reserves acquired by exchanges or reciprocal sales of other volumes of owned or controlled reserves.

On December 31, 1949, proved reserves of crude oil, distillate, natural gasoline and other natural gas liquids producible or recoverable, under presently existing economic conditions and presently known producing and recovery methods, from properties within the United States were 1,247,664,000 barrels and from properties in Venezuela 4,896,000 barrels or a total reserve of 1,252,560,000 barrels. Of this total reserve 72.7% was owned and 27.3% was controlled. Total reserves are further classified as follows: (a) owned crude oil and distillate—667,483,000 barrels of which 563,350,000 barrels were developed and 104,133,000 barrels were undeveloped; (b) controlled crude oil and distillate—206,082,000 barrels; (c) owned natural gasoline and other natural gas liquids—243,820,000 barrels; and (d) controlled natural gasoline and other natural gas liquids—135,175,000 barrels. Although the Company and its subsidiaries own or control crude oil and natural gas liquids reserves producible through secondary recovery projects not presently under successful operation, such reserves have not been included in the above estimates.

[7283]

In the above owned developed oil reserve figures are included approximately 56,000,000 barrels estimated as recoverable from the Burbank Field in Oklahoma by means of gas repressuring and water flooding operations, which are considered to be in successful operation at this time.

Also included in the owned developed oil reserve figures are amounts applicable to formations behind the pipe, which have been penetrated by wells completed in deeper formations. Some expense will be necessary in connection with plugging back, perforating the pipe and recompleting the wells in the shallower formation before such reserves are producible.

Of the owned reserves of crude oil and condensate mentioned above, 46% of the developed and 72% of the undeveloped are located in West Texas and in the Chocolate Bayou Field of the Texas Gulf Coast. In these fields the present rate of allowable production is much smaller in proportion to the future reserves than the average for the remainder of the United States, and in many of these fields only a relatively small part of the ultimate reserve has been produced. Proved reserves of natural gas, exclusive of recoverable natural gasoline and other natural gas liquids included above, producible or recoverable under presently existing economic conditions and presently known producing and recovery methods, from properties within the United States, were 15.22 trillion cubic feet at 14.65

BLEED THROUGH

BLURRED COPY

pounds per square inch absolute and 60 degrees Fahrenheit on December 31, 1949, of which 73.9% was owned and 26.1% was controlled. Of the owned natural gas reserves, on December 31, 1949, 77.8% thereof are now dedicated or contracted, and of the natural gas reserves dedicated or contracted 98.8% had the benefit of escalator price clauses as to future deliveries.

Of the Company's total reserves of natural gas, recoverable natural gasoline and other natural gas liquids owned or controlled by the Company, as of December 31, 1949, it is estimated that 95.8% of such reserves of natural gas and 86.4% of such reserves of natural gasoline and other natural gas liquids are located on acreage owned by the Company or acreage under contracts whose terms extend for the respective terms of the oil and gas leases covered by such contracts; 2.3% of such reserves of natural gas and 9.5% of such reserves of natural gasoline and other natural gas liquids are located on acreage under contracts whose terms extend for 20 years or less but more than 5 years; 1.8% of such reserves of natural gas and 3.6% of such reserves of natural gasoline and other natural gas liquids are located on acreage under contracts whose terms extend for five years or less but more than one year; and 0.1% of such reserves of natural gas and 0.5% of such reserves of natural gasoline and other natural gas liquids are located on acreage under contracts whose terms extend for one year or less. In respect of natural gasoline and other natural gas liquids, there is embraced in "acreage under contracts" acreage pro-

ducing natural gas for processing in natural gasoline plants owned and operated by others, the production from which plants is subject to purchase by the Company under gasoline purchase contracts.

The foregoing amounts of estimated reserves do not include any reserves from tidelands leases located in the Gulf of Mexico, the legal status of which is in controversy, or from properties in Canada.

Very truly yours,

K. E. BEALL, *Vice President*
Economics Department
Phillips Petroleum Company

[7284]

DESCRIPTION OF PROPERTY

GENERAL. Property, plant and equipment, less reserves for depreciation, depletion and amortization, are reflected at $428,593,776 in the consolidated balance sheet as of December 31, 1949, included herein. This investment is classified as follows: oil and gas properties and wells 48.6%; natural gasoline 14.6%; refining 14.3%; products pipe line 3%; oil pipe line 4.7%; marketing 5.3%; fertilizer 3%; service facilities 4.1%; and all other 2.4%.

The approximate average ages of the Company's investment in the principal classes of depreciable plant and equipment at December 31, 1949, are estimated to be as follows:

BLEED THROUGH
BLURRED COPY

Principal Classes of Depreciable Plant and Equipment	Gross Investment	Approximate Average Age* (Years)
Oil and Gas Production	$117,000,000	5.7
Manufacturing	229,800,000	6.8
Transportation:		
Crude Oil Pipe Lines	25,500,000	4.7
Products Pipe Lines and Terminals	28,900,000	10.6
Marketing	31,900,000	7.3

* Estimated by multiplying (after giving effect to retirements and other dispositions on a first-in, first-out basis) the amount of gross additions in each year by the number of years from June 30 of the year of expenditure to December 31, 1949, and dividing the result by the gross amount of depreciable plant and equipment at December 31, 1949.

The principal properties of the Company are set forth below as of December 31, 1949, giving effect to any substantial changes since that date.

OIL AND GAS PRODUCING PROPERTIES. The Company has a full or partial working interest in 2,544 oil or gas producing properties in the United States, comprising approximately 801,213 developed acres held in determinable fee or under lease or other form of contract employed in the industry. The Company also has in the United States an interest in 6,292,518 gross undeveloped acres. A summary of total gross acreage, developed and undeveloped, and of producing oil or gas wells, is as follows:

State	*Total Acres*	*Producing Wells*
Arkansas	20,832	483
Colorado	22,379	67
Florida	303,646	—
Georgia	170,640	—
Idaho	18,676	—
Illinois	23,908	169

Indiana	1,434	—
Kansas	347,614	1,008
Kentucky	1,231	58
Louisiana	111,225	284
Mississippi	110,120	17
Montana	128,482	299
New Mexico	207,839	139
Oklahoma	634,592	3,775
Oregon	11,193	—
Texas	4,852,860	4,140
Utah	42,402	—
Washington	1,787	—
Wyoming	82,871	169
Total	7,093,731	10,608

In addition, the Company holds rights to acquire blocks of acreage in widely scattered unproved areas, exercisable upon the completion of geological and geophysical explorations and drilling tests.

There are not included in the above-described properties the Company's whole and partial interests in 163,995 gross acres of certain oil and gas leases granted by the States of Louisiana and Texas covering offshore tidelands in the Gulf Coast area. There is pending in the United States Supreme Court a suit to

[7285]

determine that title to such tidelands belongs to the United States, and the court has so held with respect to tidelands offshore from the State of California. Accordingly, the Company may be subject to loss of its investment (in-

BLEED THROUGH

BLURRED COPY

cluding development expense) in such leases, estimated at $3,475,000 as of December 31, 1949, and may be liable for the value of oil produced therefrom, amounting to approximately $220,000 which sum is included in the amount shown in the balance sheet under the caption "Deferred Credits".

Thirty-two producing wells are located on the Company's exploitation concessions in Venezuela which aggregate approximately 186,000 acres. Warehouse and maintenance facilities located near the port at Puerto la Cruz are owned in fee, and housing and other field facilities have been constructed.

The Company holds exploration rights on 6,517,971 gross acres in Western Canada including 67,760 acres held by West Edmond Oil Company, a wholly-owned subsidiary, and in addition has oil and gas leases and licenses to drill on 130,634 gross acres.

CRUDE OIL STORAGE FACILITIES. Total crude oil storage capacity is approximately 10,247,000 barrels, all owned except 156,000 barrels of leased storage. This tankage, located in Arkansas, Idaho, Kansas, Montana, Oklahoma, Texas, Utah and Washington, is operated to maintain refinery crude oil supplies independent of variations in current production. Approximately 75% of the storage tanks are located on land held in fee and the remainder on leased land.

NATURAL GASOLINE PLANTS. The Company owns and operates 25 natural gasoline plants: 19 in Texas, 4 in Oklahoma, and 2 in New Mexico. The company also owns a joint interest in 19 plants located in Oklahoma, Texas, Ar-

kansas, New Mexico, and Wyoming, 3 of which are Company operated. Facilities are maintained as part of these plants for producing the grades of natural gasoline and other natural gas liquids required by the Company for blending and for sale. These plants are located on land owned in fee or held under leases, most of which are renewable at the option of the lessee. The Company owns approximately 4,380 miles of gathering, residue, and other gas lines with necessary compressor or booster stations located in Arkansas, Kansas, Oklahoma, Texas, and New Mexico and the Company also owns various pipe lines necessary in connection with the manufacture and sale of natural gasoline. The lines are generally located on land for which rights-ofway are held and the compressor or booster stations are located on lands either held in fee or under lease.

REFINERIES. The Company owns and operates 7 refineries, located and having daily crude oil capacity as follows: Phillips, Texas, 56,000 bbls.; Sweeny, Texas, 45,000 bbls.; Okmulgee, Oklahoma, 8,000 bbls.; Kansas City, Kansas, 50,000 bbls.; Salt Lake City, Utah, 4,200 bbls.; Pocatello, Idaho, 4,500 bbls.; and Spokane, Washington, 5,500 bbls. The Company also owns a 75% interest in and operates a refinery located at Great Falls, Montana, with a daily crude oil capacity of 2,800 bbls. The Company owns a plant for manufacturing lubricating oil components (1,500 barrels daily capacity) with an associated plant for compounding and packaging finished products, located at the Kansas City refinery. The refineries are located on land owned in fee with the exception of the Phillips, Texas, renery which is located on land held under renewable lease. Refining facili-

BLEED THROUGH

BLURRED COPY

ties at Sweeny are served by barge loading and unloading equipmnt on the San Bernard River and a deep water terminal at Freeport, Texas, with connecting pipe lines.

CRUDE OIL PIPE LINES. The Company owns 986 miles of gathering lines and 1,280 miles of trunk lines (including jointly-owned properties, together with necessary pumping stations, working tanks and other equipment. The jointly-owned lines consist of 94 miles of trunk lines and 106 miles of gathering lines in Montana (75% owned) and 20 miles of gathering lines in Oklahoma (50% owned). The

[7286]

gathering line systems are located principally in the Panhandle, West Texas, East Texas and Gulf Coast areas of Texas, Central and Eastern Oklahoma, Central and Southeastern Kansas, Cut Bank and Pondera areas of Montana, and Southern Arkansas. The Panhandle and West Texas gathering lines, together with the trunk line from West Texas, supply the Phillips, Texas, refinery. The trunk lines in Oklahoma and Kansas, supplying the Okmulgee and Kansas City refineries, extend from Oklahoma City to Seminole and Okmulgee, Oklahoma, and from Oklahoma City to Kansas City, Kansas, with a branch line extending to Western Kansas. The jointly-owned system in Montana is the principal source of supply for the refinery at Great Falls, Montana. The pipe lines are generally located on land for which rights-of-way are held, pumping stations and necessary tankage being located on lands either held in fee or under lease.

The Company also has a one-third interest in Kaw Pipe Line Company, a common carrier, which is the owner of an extensive system in Western Kansas connected to the Oklahoma-Kansas trunk line of the Company.

The Company presently contemplates the construction jointly with another oil company of 280 miles of 12″ crude oil trunk line extending from near Borger, Texas, to Yale, Oklahoma. The line will have a capacity of 38,000 barrels per day and will cost approximately $7,350,000. It is contemplated that as much as 90% of the construction cost may be financed by long-term debt, but arrangements for such financing have not been made.

PRODUCTS PIPE LINES. The Company owns and operates 7 miles of 12″, 1,377 miles of 8″ and 54 miles of 6″ products pipe lines extending from the Panhandle of Texas to East Chicago, Indiana, together with necessary pumping stations. Terminals, comprising tankage and other necessary facilities, are located at or near Phillips, Texas; Laverne, Oklahoma; Wichita, Paola and Kansas City, Kansas; Jefferson City, Missouri; East St. Louis, Decatur and Kankakee, Illinois; and East Chicago, Indiana. These lines, together with the jointly-owned Phillips, Texas—LaJunta, Colorado, line described under "History and Business" herein, all of which are common carrier pipe lines, are located on land for which rights-of-way are held. The pumping stations and terminals are located on land owned in fee or held under lease.

Supplementing its products pipe line facilities, the Company owns a 4.99% stock interest in Great Lakes Pipe

BLEED THROUGH

BLURRED COPY

Line Company which owns and operates an extensive common carrier products pipe line, through which the Company's products are transported to certain of the North Central States.

TANK CARS AND AUTOMOTIVE EQUIPMENT. At December 31, 1949, the Company was operating a fleet of 3,416 tank cars, of which 532 were Company-owned and 2,884 were leased. In addition, the Company owns trucks, tractors, automobiles and airplanes.

MARKETING. At December 31, 1949, the Company owned or leased 1,607 operating gasoline and oil service stations and 833 operating bulk stations located in the Company's principal marketing territory. The Company also owns 17 bulk stations for the storage and distribution of liquefied petroleum gases, which are on land held in fee or under long-term lease and are located in Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, New Jersey, Ohio, Pennsylvania and Wisconsin.

CHEMICAL MANUFACTURING PLANTS. The principal chemical manufacturing plants, all of which, unless otherwise indicated, are owned and located on sites owned in fee, are: (1) Philblack furnace carbon black plants near Borger, Texas—capacity 193,000,000 pounds per year. (2) Cactus anhydrous ammonia plant near Etter, Texas—capacity 154,000 tons per year. The original plant and site are held under a terminable

[7287]

lease from the United States Army and a substantial portion of the plant enlargement is owned by the Company. (3)

Cactus nitric acid plant near Etter, Texas—capacity 84,000 tons per year. The plant and site are held under a terminable lease from the United States Army and a minor portion of the plant is owned by the Company. (4) Cactus ammonium nitrate fertilizer plant near Etter, Texas—capacity 100,000 tons per year. (5) Port Adams ammonium sulfate plant near Houston, Texas—capacity 270,000 tons per year. (6) Near Phillips, Texas, are located the Company's sulfur compounds plant, reference fuels fractionators, solvents fractionators, pure hydrocarbons plant, and similar facilities. These latter plants are located partially on land held under long-term leases.

The Company owns a 50% stock interest in Texas-Elf Carbon Company which produces channel carbon black at its plant, located in Gray County, Texas, with a daily capacity of 55,000,000 cubic feet of gas.

PROPERTY OF UNCONSOLIDATED SUBSIDIARIES. The principal assets of West Edmond Oil Company, a wholly owned subsidiary, are 39 producing oil and gas leases in the States of Oklahoma, Kansas, and Montana, with an average daily net production during 1949 of approximately 1,300 barrels. Wasatch Southern Gasoline Company, in which the Company owns a 50.96% stock interest, owns and operates marketing facilities in the area of Pleasant Grove, Utah.

GENERAL. The principal operating offices of the Company are located at Bartlesville, Oklahoma, in buildings owned by the Company, supplemented by leased space in various other buildings. The Company has under construction in Bartlesville a twelve-story office building now partly

BLEED THROUGH

BLURRED COPY

occupied, and an apartment building substantially completed, the aggregate estimated cost of which is $12,500,000 which may be financed in substantial part by long term borrowings or by sale of such properties under lease-back provisions but no such arrangements have been made. The Company maintains offices in New York and in various divisions and districts in its operating territory. The Company's principal research laboratories are maintained in buildings owned by the Company and located at Bartlesville, Oklahoma, and Phillips, Texas.

[7339]

Exhibit No. 45-A

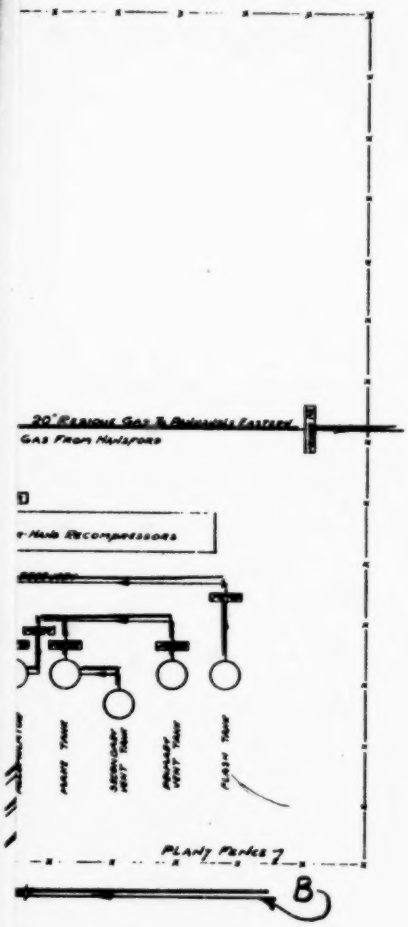
[*Note: Cover, title page, and table of contents omitted.*]

Diagrammatic sketch bearing legend "Phillips Petroleum Company — Bartlesville, Oklahoma — Flow Sheet — Sherman & Hansford Plant Gas System."

BLEED THROUGH

BLURRED COPY

Exhibit No. 45-A



— Raw Gas

— Residue Gas

— Plant Vapors

PHILLIPS PETROLEUM COMPANY
BARTLESVILLE, OKLAHOMA

FLOW SHEET
SHERMAN & HANSFORD PLANT GAS SYSTEM

FOLD OUT TO LARGE TO BE FILMED

[7340]

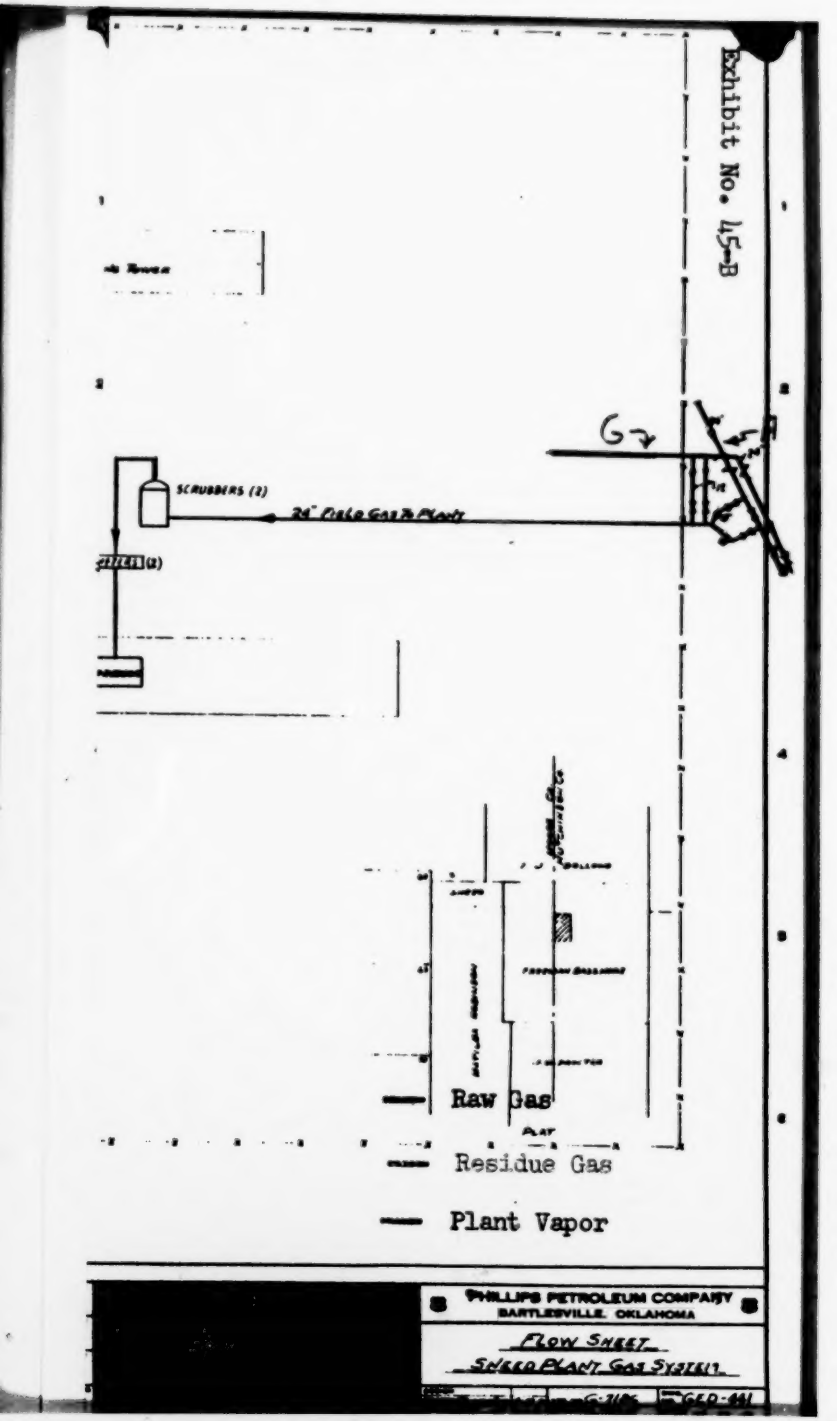
Exhibit No. 45-B

Diagrammatic sketch bearing legend "Phillips Petroleum Company — Bartlesville, Oklahoma — Flow Sheet — Sneed Plant Gas System."

BLEED THROUGH

BLURRED COPY

Exhibit No. 45-B



FOLD OUT TO LARGE TO BE FILMED

[7341]

Exhibit No. 45-C

Diagrammatic sketch bearing legend "Phillips Petroleum Company—Diagrammatic Layout of Plant Piping at Gray Plant."

BLEED THROUGH

BLURRED COPY

PLAT

FEDERAL POWER COMMISSION

DOCKET NO. G-1148

PHILLIPS PETROLEUM COMPANY

Residue
Raw G

GRAMMATIC LAYOUT OF PLANT PIPI

OLD OUT TO LARGE TO BE FILMED

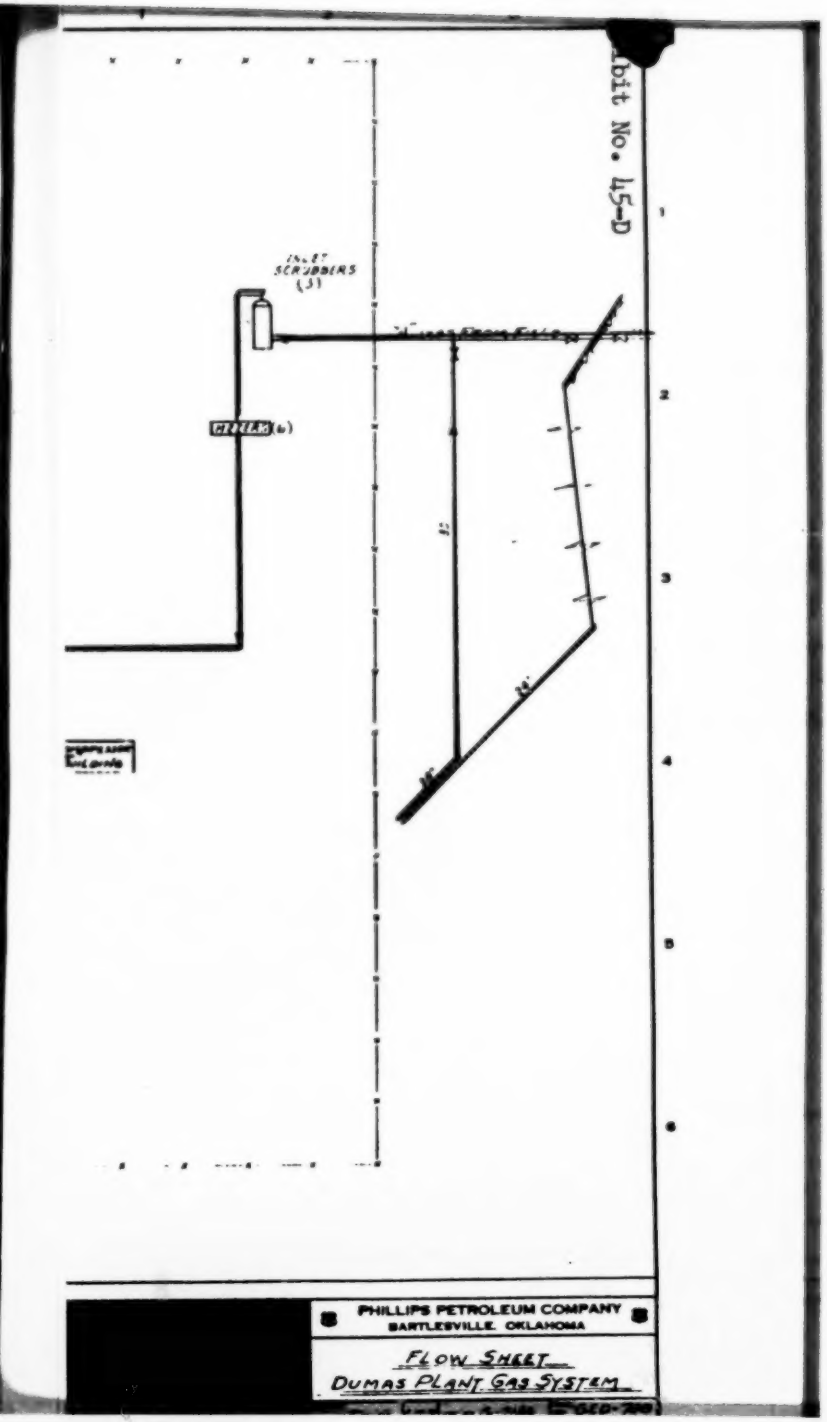
[7342]

Exhibit No. 45-D

Diagrammatic sketch bearing legend "Phillips Petroleum Company — Bartlesville, Oklahoma — Flow Sheet — Dumas Plant Gas System."

BLEED THROUGH

BLURRED COPY



FOLD OUT TO LARGE TO BE FILMED

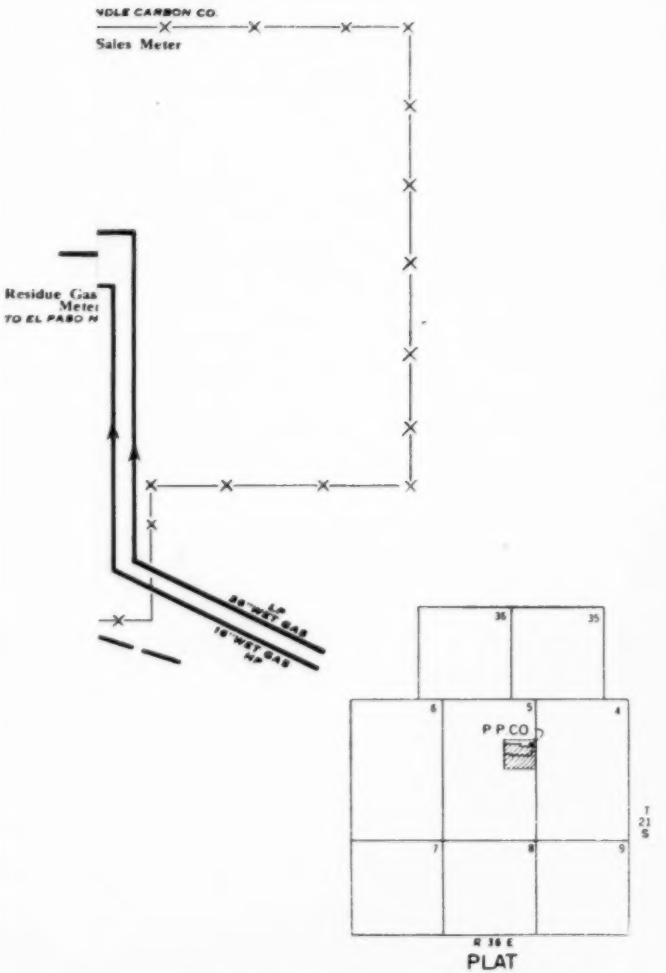
[7343]

Exhibit No. 45-E

Diagrammatic sketch bearing legend "Phillips Petroleum Company—Diagrammatic Layout of Plant Piping at Eunice Plant."

BLEED THROUGH

BLURRED COPY



PLAT

FEDERAL POWER COMMISSION

DOCKET NO. G-1148

PHILLIPS PETROLEUM COMPANY

DIAGRAMMATIC LAYOUT OF PLANT PIPING

AT

FOLD OUT TO LARGE TO BE FILMED

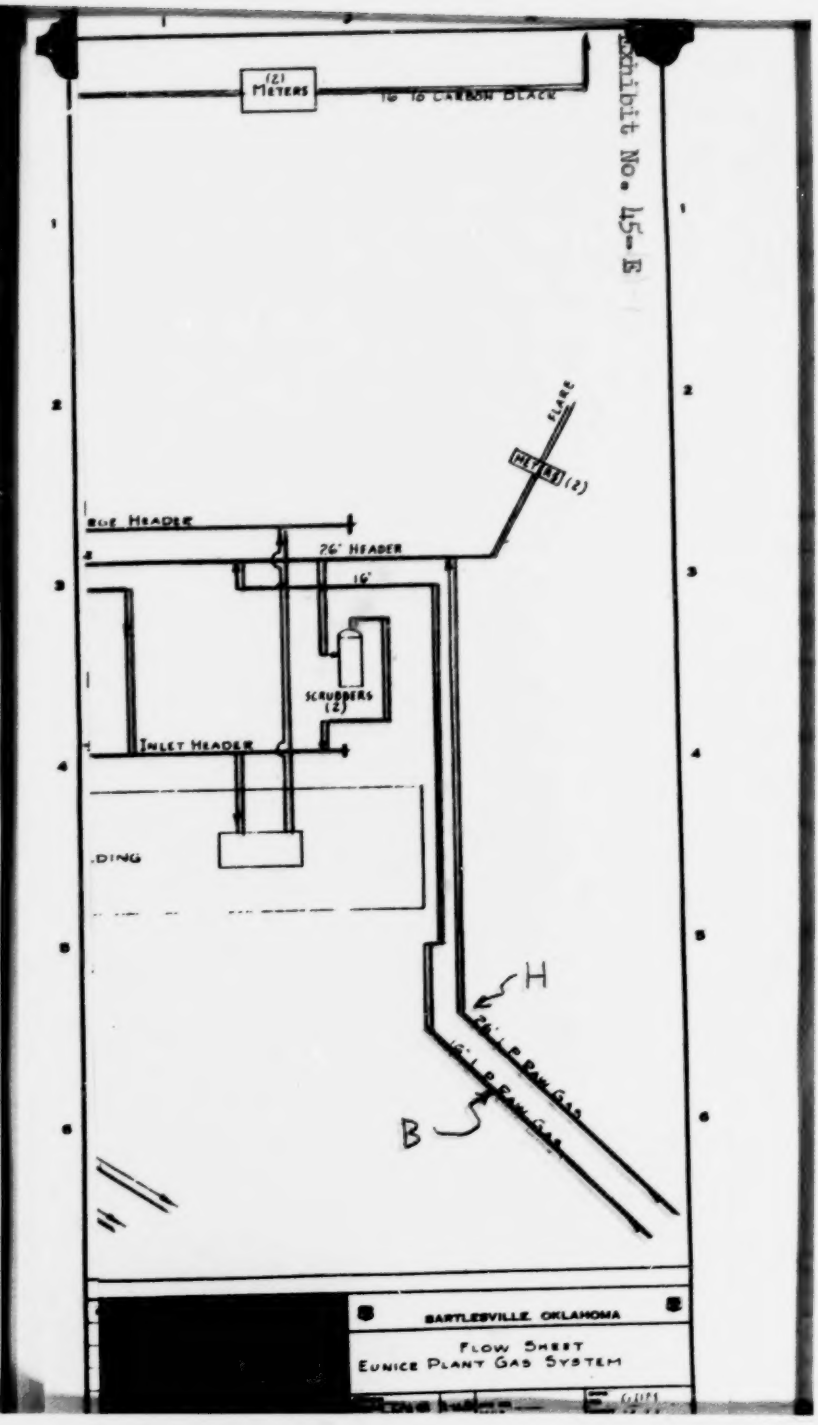
[7344]

Exhibit No. 45(E)-1

Diagrammatic sketch bearing legend "Bartlesville, Oklahoma—Flow Sheet—Eunice Plant Gas System."

BLEED THROUGH

BLURRED COPY



FOLD OUT TO LARGE TO BE FILMED

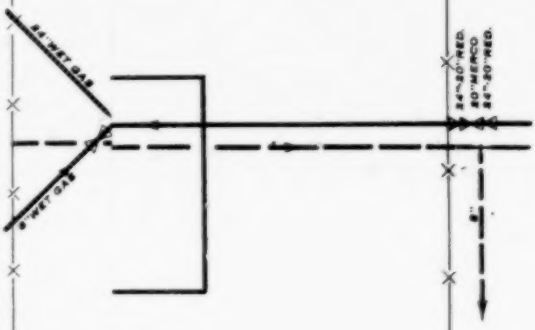
[7345]

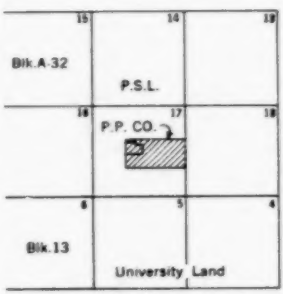
Exhibit No. 45-F

Diagrammatic sketch bearing legend "Phillips Petroleum Company—Diagrammatic Layout of Plant Piping at Fullerton Plant Area."

BLEED THROUGH

BLURRED COPY





PLAT

FEDERAL POWER COMMISSION

DOCKET NO. G-1148

PHILLIPS PETROLEUM COMPANY

RAMMATIC LAYOUT OF PLANT PIPING

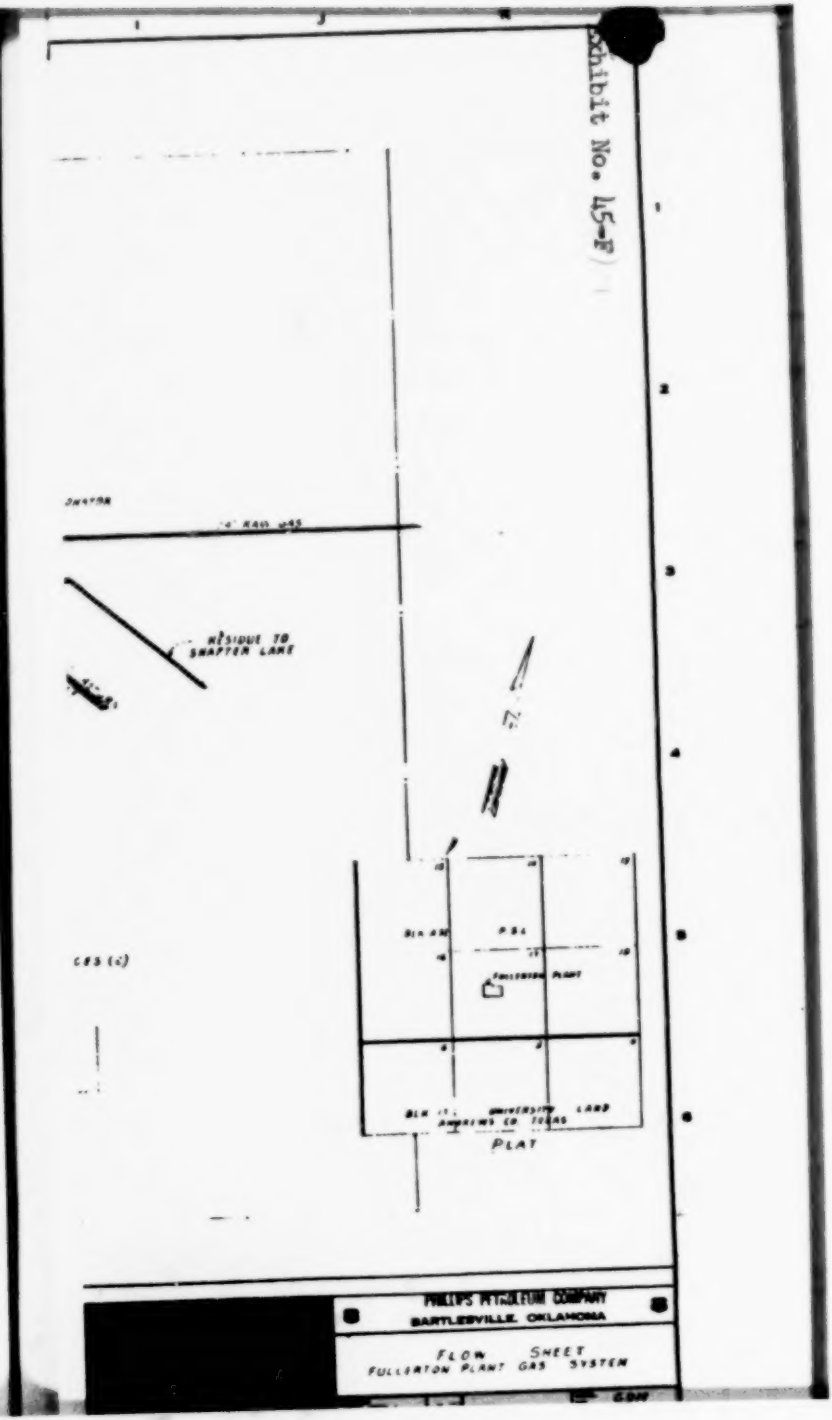
FOLD OUT TO LARGE TO BE FILMED

[7346]

Exhibit No. 45(F)-1

Diagrammatic sketch bearing legend "Phillips Petroleum Company—Bartlesville, Oklahoma, Flow Sheet—Fullerton Plant Gas System."

BLEED THROUGH BLURRED COPY



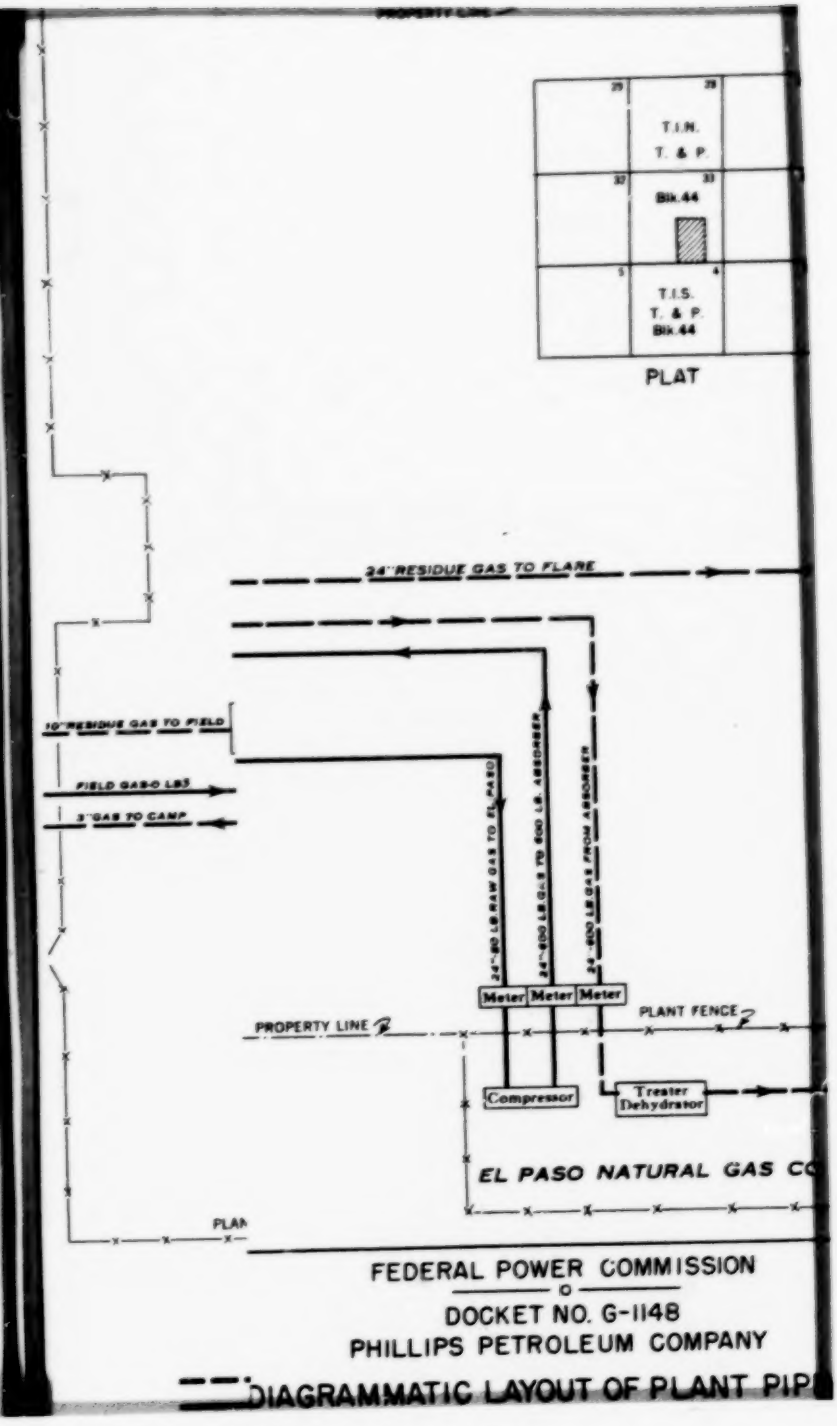
FOLD OUT TO LARGE TO BE FILMED

[7347]

Exhibit No. 45-G

Diagrammatic sketch bearing legend "Phillips Petroleum Company—Diagrammatic Layout of Plant Piping at Goldsmith Plant."

BLEED THROUGH BLURRED COPY



FOLD OUT TO LARGE TO BE FILMED

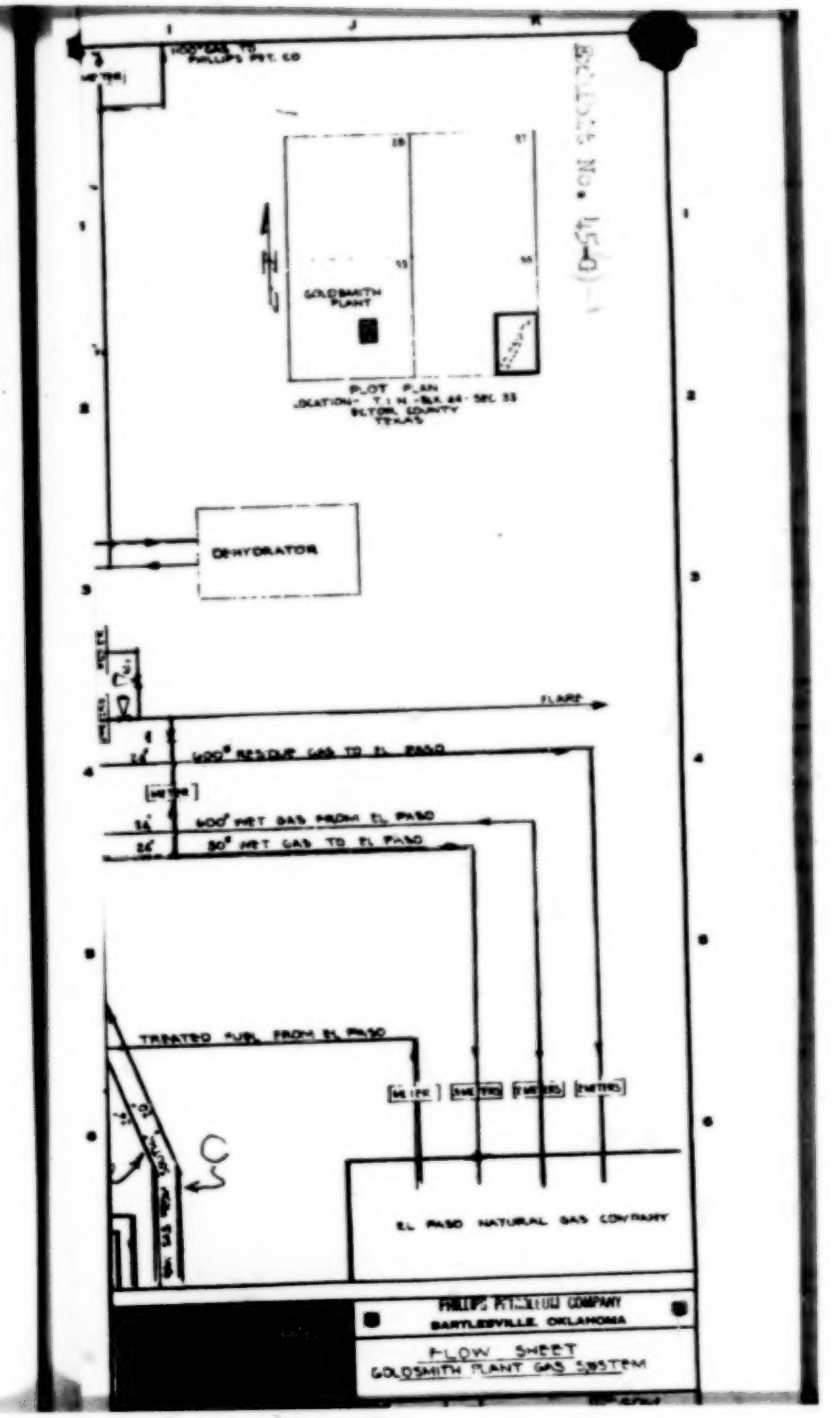
[7348]

Exhibit No. 45(G)-1

Diagrammatic sketch bearing legend "Phillips Petroleum Company, Bartlesville, Oklahoma—Flow Sheet—Goldsmith Plant Gas System."

BLEED THROUGH

BLURRED COPY



FOLD OUT TO LARGE TO BE FILMED

[7349]

Exhibit No. 45-H

Diagrammatic sketch bearing legend "Phillips Petroleum Company—Diagrammatic Layout of Plant Piping at Crane Plant Area."

BLEED THROUGH

BLURRED COPY

PLAT

FEDERAL POWER COMMISSION

DOCKET NO. G-1148

PHILLIPS PETROLEUM COMPANY

DIAGRAMMATIC LAYOUT OF PLANT PIPING

FOLD OUT TO LARGE TO BE FILMED

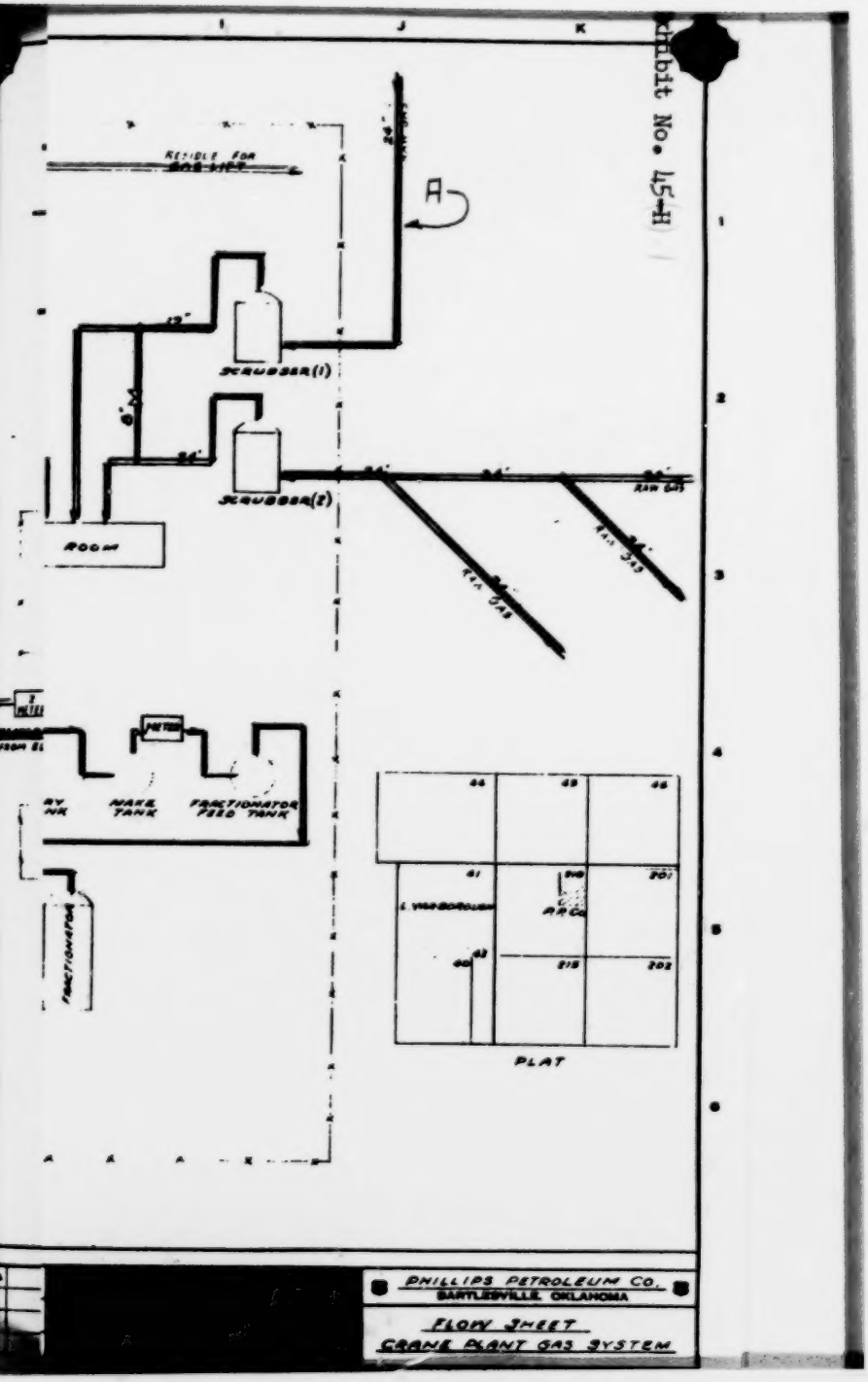
[7350]

Exhibit No. 45(H)-1

Diagrammatic sketch bearing legend "Phillips Petroleum Company — Bartlesville, Oklahoma — Flow Sheet — Crane Plant Gas System."

BLEED THROUGH

BLURRED COPY



FOLD OUT TO LARGE TO BE FILMED

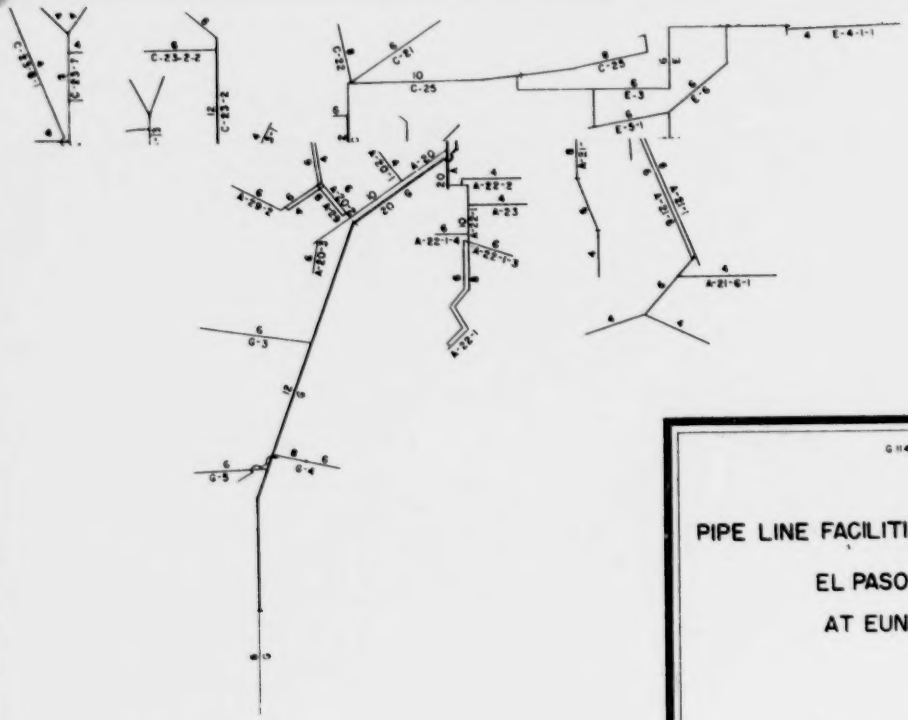
[7355]

Exhibit No. 48

Sketch bearing legend "Diagram of Pipe Line Facilities Used to Supply Natural Gas to El Paso Natural Gas Company at Eunice Plant, New Mexico."

BLEED THROUGH BLURRED COPY

FOLD OUT TO LARGE TO BE FILMED



GH48 PHILLIPS PETROLEUM COMPANY

DIAGRAM OF
PIPE LINE FACILITIES USED TO SUPPLY NATURAL GAS
TO
EL PASO NATURAL GAS COMPANY
AT EUNICE PLANT, NEW MEXICO

APPROXIMATE SCALE

0 1 2

MILES

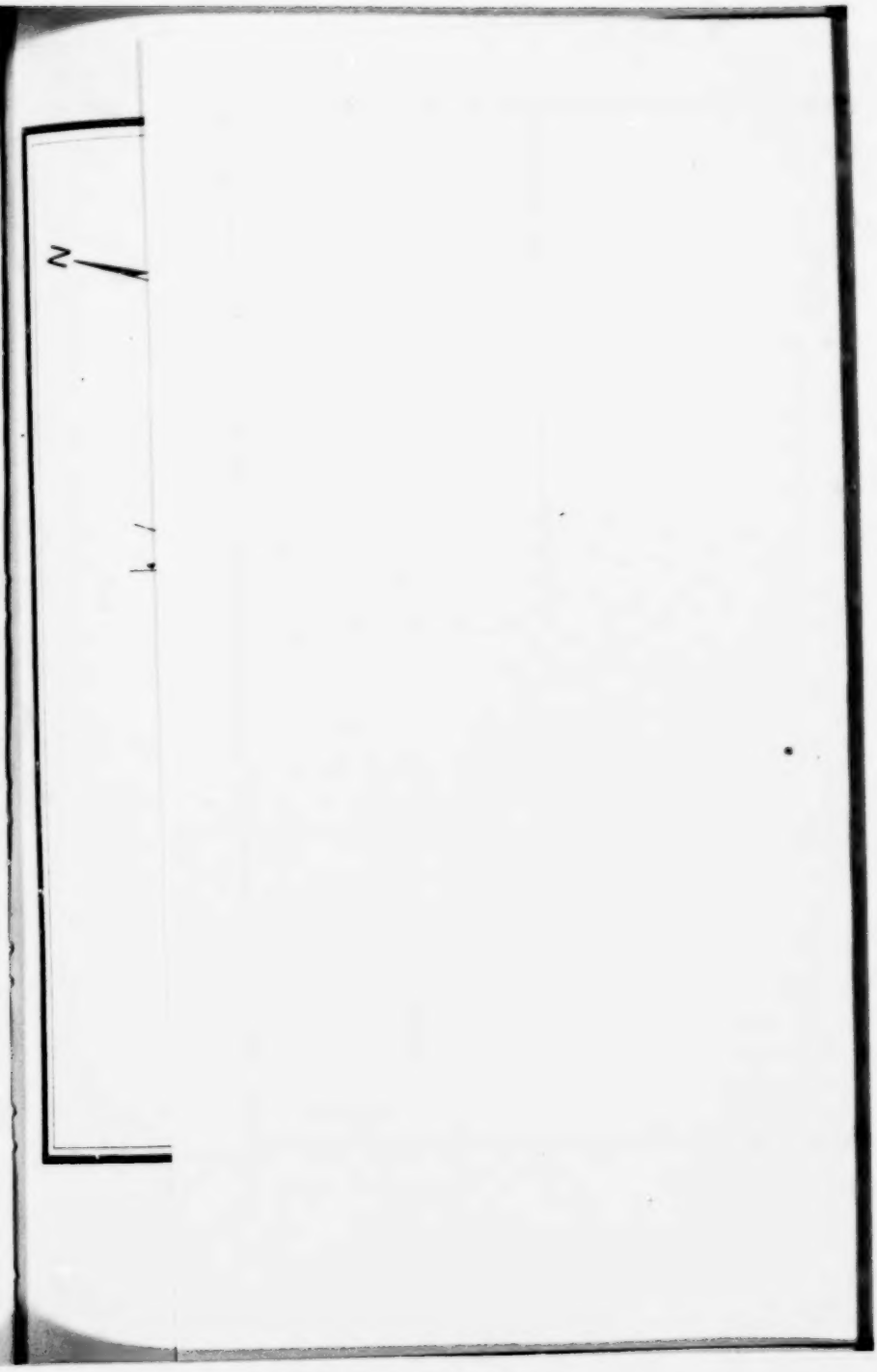
[7356]

Exhibit No. 49

Sketch bearing legend "Diagram of Pipe Line Facilities Used to Supply Natural Gas to El Paso Natural Gas Company at Fullerton Plant, Texas (Andrews County)."

BLEED THROUGH

BLURRED COPY



FOLD OUT TO LARGE TO BE FILMED

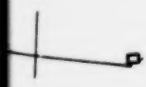
[7357]

Exhibit No. 50

Sketch bearing legend "Diagram of Pipe Line Facilities Used to Supply Natural Gas to El Paso Natural Gas Company at Goldsmith Plant, Texas."

BLEED THROUGH

BLURRED COPY



FOLD OUT TO LARGE TO BE FILMED

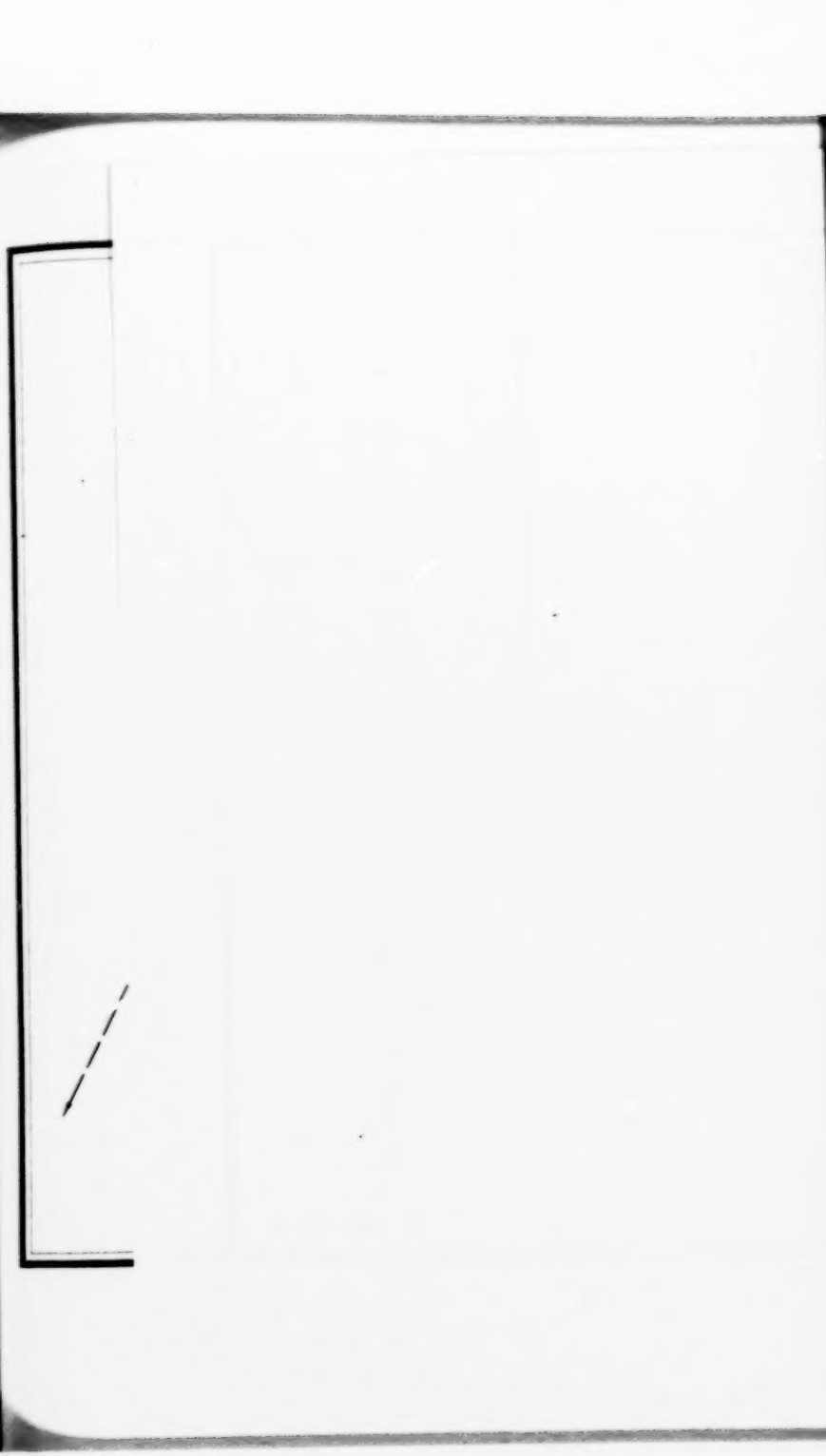
[7358]

Exhibit No. 51

Sketch bearing legend "Diagram of Pipe Line Facilities Used to Supply Natural Gas to El Paso Natural Gas Company at Crane Plant, Texas (Crane County)."

BLEED THROUGH

BLURRED COPY



FOLD OUT TO LARGE TO BE FILMED

[7404]

Exhibit No. 52

RESIDUE GAS CONTRACT

AGREEMENT, made and entered into this 5th day of July, 1945, by and between PHILLIPS PETROLEUM COMPANY, a Delaware Corporation, and CONTINENTAL OIL COMPANY, a Delaware Corporation, hereinafter referred to as "Sellers," and CITIES SERVICE GAS COMPANY, a Delaware Corporation, hereinafter referred to as "Buyer."

WITNESSETH:

* * *

[7407]

4. The point of delivery of all gas sold and purchased hereunder shall be at the south fence line of Sellers' plant site. Sellers agree to install, operate and maintain such pipe line. regulating devices, drips, separators, cooling equipment and compressor equipment as may be reasonably necessary to deliver such gas reasonably free from liquids against the varying pressure in Buyer's pipe line, up to but not in excess of five hundred (500) pounds per square inch gauge, and to deliver such gas at temperatures which reasonably protect Buyer's pipe line. Sellers shall dehydrate the gas delivered hereunder to a dew point, at delivery pressure, which is at least ten degrees (10°) below the prevailing atmospheric wet bulb temperatures; provided, that Sellers shall not be required to reduce the dew point below thirty degrees (30°) Fahrenheit.

* * *

BLEED THROUGH

BLURRED COPY

[7427]

BEFORE THE CORPORATION COMMISSION
OF THE STATE OF OKLAHOMA

IN THE MATTER OF THE PETITION FOR THE CREATION OF THE WEST EDMOND HUNTON LIME UNIT HAVING FOR ITS PURPOSE THE UNITIZED MANAGEMENT, OPERATION AND FURTHER DEVELOPMENT OF A PORTION OF THE WEST EDMOND HUNTON LIME COMMON SOURCE OF SUPPLY OF OIL AND GAS LOCATED IN OKLAHOMA, LOGAN, KINGFISHER, AND CANADIAN COUNTIES, OKLAHOMA: THE DEFINING OF THE UNIT AREA THEREOF AND THE PRESCRIBING OF THE PLAN OF UNITIZATION APPLICABLE TO SUCH UNIT AND UNIT AREA.

CAUSE CD No. 1355
ORDER No. 20212

REPORT AND ORDER OF THE COMMISSION

The above styled and numbered cause is a proceeding brought by the lessees of a substantial majority of the acreage in the West Edmond Hunton Lime oil and gas pool located in Oklahoma, Logan, Kingfisher and Canadian Counties, Oklahoma, seeking to unitize the management, operation and further development of said pool for the purpose of preventing the waste of gas and of substantially increasing the ultimate recovery of oil therefrom, all as authorized and provided for in H. B. 339 of the 1945 Legislature. The bringing of this proceeding followed months of cooperative study of the pool and of the benefits of unitization engaged in by substantially all of the operating lessees in the pool and

in which all were invited to participate. The original petition herein, attached to which was a recommended Plan of Unitization applicable to said pool, was filed January 29, 1947. Pursuant to order of the Commission said petition was set for hearing March 18, 1947, at 10:00 o'clock, A. M., in the Commission's Court Room in the State Capitol Office Building, Oklahoma City, Oklahoma, and notice thereof was published once a week for three consecutive weeks in a newspaper of general circulation in each of the four counties in which the West Edmond Lime pool is located. On March 5, 1947, an amended petition was filed for the purpose of making certain amendments to the recommended Plan of Unitization. A complete copy of the amended Plan of Unitization was attached to said amended petition. Pursuant to the further order of the Commission, said amended petition was set for hearing at the same time and place as the hearing on the original petition and notice thereof was published in a newspaper of general circulation in Oklahoma County, Oklahoma. In advance of the hearing, as is its usual custom in oil and gas matters, the Commission mailed mimeographed copies of said petitions, together with information as to the time of the hearing, to all persons on its established mailing list, which includes all of the operating lessees within the West Edmond Hunton Lime pool. As a result, all parties in interest were given ample opportunity to be fully advised with respect to the subject matter of said hearing.

The hearing of said cause was commenced at the time and place so fixed, namely, March 18, 1947, at 10:00 o'clock A. M. in the Commission's Court Room, Capitol Office Building, Oklahoma City, and was continued at the same place, throughout all of the following days, to wit: March 18, 19, 20, 21, 25, 26, 27 and 28; June 3, 4, 5, 25 and 26; and July 1, 2, 3, 8, 9 and 10; all in 1947. The continuance of said hearing

BLEED THROUGH

BLURRED COPY

from time to time was by proper orders on continuance. At said hearing the petitioners and subscribers to the proposed Plan of Unitization were represented by the following named attorneys: W. W. Heard, W. H. Brown, George Hazlett, W. R. Wallace, R. O. Wilson, T. Murray Robinson and R. M. Williams. The protestant

[7428]

CAUSE CD No. 1355 ORDER No. 20212

British-American Oil Producing Company appeared by its attorneys, Donald Prentice, Earl Pruet and Kent Shartel. The protestant Gulf Oil Corporation appeared by its attorney, Russell G. Lowe. The protestant H. H. Wagner appeared by his attorneys, F. C. Love and V. P. Crowe. The Denver Producing and Refining Company appeared at the outset of the hearing as a protestant but during the course of the hearing announced the withdrawal of its protest due to the sale of its property to the Champlin Refining Company, which purchaser elected to join in the proposed Plan of Unitization as a Subscriber thereto. W. W. Whistler, a royalty owner appeared as a protestant by his attorneys, Lynn Adams. Approximately 180 royalty owners appeared as protestants by their attorney, Coleman Hayes. James Johnson, both a working interest and royalty owner, appeared in person in support of the petition. A number of royalty owners wrote letters to the Commission urging the granting of the petition. Other royalty owners and various parties in interest were present at the hearing from time to time but took no part.

At the hearing everyone who desired to do so, regardless of the interest of such person, was given full opportunity to offer any and all competent evidence that such person chose to offer, either for or against the recommended Plan of

Unitization or by way of amendment thereof, and to otherwise be heard in regard thereto. The evidence so introduced consisted of extensive geological, engineering and other proof concerning the history, discovery, development, operation and present condition of the West Edmond Hunton Lime pool and the results obtainable both under present competitive methods of operation and through the unitization thereof; proof both pro and con as to the fairness, reasonableness and equitableness of the recommended Plan of Unitization; and proof by protestants with respect to certain amendments which they claim should be made in said plan.

In addition to the knowledge gained from the evidence introduced at said hearing, the Commission has a general knowledge of the pool and of conditions existing therein, gained through the exercise by it of its jurisdiction over such pool under the conservation laws of the state dating from the discovery thereof. As a result of the testimony, statements and arguments introduced and made in the hearing here under consideration, and by reason of its general knowledge of the West Edmond Hunton Lime pool, gained through the exercise of its jurisdiction under the conservation laws of the state, the Commission is of the opinion that it has sufficient knowledge and information upon which to base a proper order in this cause.

NOW, on the 29th day of July, 1947, the Commission having previously taken said cause under advisement and having considered the matter in conference and each of the commissioners being well and sufficiently advised, the Commission makes the following findings of fact and conclusions of law and enters the following order authorizing and approving the creation of the West Edmond Hunton Lime Unit, defining the Unit Area thereof and prescribing the Plan of Unitization Applicable to each Unit and Unit area.

BLEED THROUGH

BLURRED COPY

FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. That the notice of the filing of both the petition and amended petition herein and the time and place of hearing thereof and the purpose of said hearing was regularly given in all respects as by law required, and that the Commission has jurisdiction of the subject matter of said petition and amended petition and of all persons interested therein and has jurisdiction to make and promulgate the hereinafter prescribed order.

[7429]

CAUSE CD No. 1355 ORDER No. 20212

2. That the lands (hereinafter designated as the Unit Area) outlined by the hatched line on the map marked "Exhibit A" and attached to the Plan of Unitization attached to and made a part of this order, are underlaid with an oil and gas bearing formation known as the Hunton Lime formation found at depths ranging from approximately 6600 feet on the east side of said Unit Area to approximately 7200 feet on the west side of said Unit Area; that said Hunton Lime formation has an average formation thickness of approximately 350 feet and consists of a number of lithologic subdivisions or members, most important of which are the Bois d'Arch member, the Henry House-Harrington member and the Chimney Hill member; that said Hunton Lime formation as above described and which has been designated by the Commission as the West Edmond Hunton Lime pool or field, constitutes a single common source of supply of oil and gas, all portions of which are permeably connected so as to permit the migration of oil and gas from one portion of said common source of supply to another.

3. That said common source of supply of oil and gas was first discovered on or about April 12, 1943, by the completion of the Fox-Schmitz Wagner #1 Well in the NW/4 of the NW/4 of the SW/4 of Section 32, Township 14 North, Range 4 West, Oklahoma County, Oklahoma; that at the present time there are 737 wells located within the aforesaid Unit Area and producing from said common source of supply.

4. That the portion of said common source of supply underlying and included within the aforesaid Unit Area and which is made subject to this order has been reasonably defined by actual drilling operations, both by the drilling of wells within and the drilling of wells outside said Unit Area; that said Unit Area consists of approximately 30,000 acres of land in areal extent constitutes one of the largest oil and gas pools in the State of Oklahoma.

5. That the lands embraced within the aforesaid Unit Area are divided into a large number of tracts owned in severalty by a multitude of owners varying interests therein, including leasehold interest, royalty interests, and various and sundry other rights and interests; that the lessees within the Unit Area are divided into two classes, (1) lessees engaged in the physical operation of the several leases, and (2) lessees owning leasehold interests other than an operating interest; that of the total leasehold interests within the Unit Area approximately 98.7592% is owned by lessees of the class first named, i. e., operating lessees, consisting of approximately 32 such lessees, with the remaining 1.2408% of the leasehold interests within the Unit Area being owned by lessees of the second class; i. e., nonoperating lessees, consisting of approximately 20 such lessees; that the royalty interest under said leases are owned by not less than 2500 royalty owners owning varying interests.

BLEED THROUGH

BLURRED COPY

6. That the petitioners in this cause are lessees of record of not less than 65% of the area of the common source of supply herein sought to be unitized; that the subscribers to the Plan of Unitization herein recommended and which is approved and prescribed by the Commission are lessees of record of approximately 90.44% of the area of said common source of supply herein sought to be unitized; that the lessees appearing at the hearing and protesting the granting of the petition herein are lessees of record of approximately 5.8093% of the proposed Unit Area; that the lessees of the remaining percentage of the Unit Area have not appeared for or against the granting of the petition.

[7430]

CAUSE CD No. 1355 ORDER No. 20212

7. That at all times since its discovery and continuing to the present time, said West Edmond Hunton Lime common source of supply of oil and gas, subject only to the orders of the Commission issued under authority of the General Conservation Laws of the State, has been developed and operated by and under individual pressure depletion methods of development and operation; that under the orders of the Commission each of the separately owned tracts as defined and described in the Plan of Unitization hereto attached is a separate Unit of development and operation for oil and gas purposes; that by reason of the division of said proposed Unit Area into small tracts or Units for development and operating purposes and because of said individual methods of operation conducted on each such separately owned tract there has been and still continues to be a disproportionate, inequitable and wasteful utilization and dissipation of the gas energy in the reservoir to the injury, detriment and disadvantage of the other tracts therein and

of the common source of supply as a whole, large volumes of gas are being wasted and millions of barrels of oil were left in said common source of supply unrecovered and unrecoverable except by and through unitized methods of operation.

8. That by and through the unitization of the proposed Unit Area and the unitized management, operation and further development thereof as a Unit, all as set out in the Plan of Unitization hereto attached, full use can be made of the gas energy in the reservoir to the mutual advantage of all the owners of said common source of supply of oil and gas, the waste of large volumes of oil and gas can be prevented, water encroachment on the lower side of the pool can be properly controlled and utilized, a more equitable distribution of the recoverable oil and gas can be had as between the several owners of the pool, substantially more oil amounting to millions of barrels can be recovered from the common source of supply than can otherwise be recovered, and the correlative rights of the several owners can be better protected.

9. That the unitization and the unitized management, operation and further development of said common source of supply as a Unit is reasonably necessary to effectively carry on the unitized methods of operation described in said proposed Plan of Unitization.

10. That any one or all of said unitized methods of operation as applied to the common source of supply underlying and included within the proposed Unit Area are feasible, will prevent waste, and will, with reasonable probability, result in the increased recovery of substantially more oil and gas from the common source of supply than would otherwise be recovered, that the estimated additional cost of conducting such operations will not exceed the value of

BLEED THROUGH BLURRED COPY

the additional oil and gas so recovered; that such unitization and the adoption of any one or more of such unitized methods of operation is for the common good and will result in the general advantage to the owners of the oil and gas rights in and to the portion of the common source of supply thereby affected.

11. That the Unit Area is of such size and shape as is reasonably required for the successful and efficient conduct of any one or all of the unitized methods of operation described in the attached Plan of Unitization; that the conduct of any one or any combination thereof or all of said unitized methods of operation will have no material adverse effect on the remainder of said common source of supply.

[7431]

CAUSE CD No. 1355 ORDER No. 20212

12. That neither said West Edmond Hunton Lime common source of supply of oil and gas nor any part or parts thereof were being operated by or under pressure maintenance, repressing or secondary recovery methods of operation as of the effective date of H. B. 339 of the 1945 Oklahoma Legislature.

13. That the recommended Plan of Unitization attached to the amended petition filed herein, a copy of which is attached to this order and is made a part hereof, is one suited to the needs and requirements of the West Edmond Hunton Lime Unit, the creation of which is hereby authorized and approved, taking into account all the facts and conditions found by the Commission to exist in respect thereto; that said Plan of Unitization is fair, reasonable and equitable and contains all the terms, provisions, conditions and requirements reasonably necessary and proper to protect,

safeguard and adjust the respective rights and obligations of the several persons affected, including royalty owners, owners of overriding royalty interests, oil and gas payments, carried interests, interests, mortgages, lien claimants and others, as well as the lessees, and such as will effectuate and accomplish the purposes of H. B. 339 of the 1945 Oklahoma Legislature; that said Plan of Unitization provides for the efficient unitized management and control of the further development and operation of the Unit Area for the recovery of oil and gas from the common source of supply affected; that the division of interest set forth in "Exhibit B" attached to said Plan of Unitization pursuant to which the Unit production is to be apportioned and allocated among and to the several separately owned tracts within the Unit Area is fair and equitable and is such as will reasonably permit persons otherwise to share in or benefit by the production from such separately owned tracts to receive, in lieu thereof, their fair, equitable and reasonable share of the Unit production or other benefits thereof; that the division of interest assigned to the several separately owned tracts in the Unit Area as set out in said "Exhibit B" to said Plan of Unitization is fair and reasonably representative of the value of said several tracts for oil and gas purposes and the contributing value thereof to the Unit in relation to like values of other tracts in the Unit; that the basis used to arrive at said division of interest takes into account the acreage of the several separately owned tracts, the quantity of oil and gas recoverable therefrom, the location thereof on structure, the probable productivity of oil and gas from such tracts, the quantity of oil and gas recoverable therefrom, the probable productivity of oil and gas from such tracts in the absence of unitization, the burden of operation to which such tracts will or are likely to be subjected, together with all other pertinent engineering, geological and operating factors as are reasonably susceptible of determination; that the

BLEED THROUGH

BLURRED COPY

manner in which and the basis, terms and conditions on which the cost and expense of the further development and operation of the Unit Area shall be financed and apportioned among and assessed against the tracts and interests chargeable therewith are fair, reasonable and equitable; that the provisions of the said Plan with respect to taking over and using the wells, equipment and other properties of the several lessees within the Unit Area, including the method of arriving at the compensation therefor and otherwise proportionately equalizing and adjusting the investment of the several lessees in the project as of the effective date of the Unit operations are fair, reasonable and equitable; that the provisions of said Plan with respect to the creation of an operating committee and the powers and duties of such committee are fair, reasonable and equitable.

[7432]

CAUSE CD No. 1355 ORDER No. 20212

14. That in the ordinary course of events there will be tracts within the Unit Area which as of the effective date of said Plan of Unitization will have produced oil from said Hunton Lime formation in excess of the amount such tracts were allowed to produce under the prior conservation orders of the Commission, which said excess oil is known and is referred to in this order as overproduction; that it would be unfair and in violation of the correlative rights of the owners of other tracts in said Unit Area if such overproduced tracts are not required to make up such overproduction; that the amount of the overproduction charged against each such tract should be charged against and made up out of the Unit production of oil allocated to such tract under the Plan of Unitization.

15. That the Corporation Commission, since the discovery of said Hunton Lime Pool, has regulated the production of oil and gas therefrom and that in the absence of unitization, it was impossible to control the venting of gas in said field; that the Commission has fixed gas-oil ratio limitations at various times in an effort to reduce the amount of gas being vented at the wells and at the gas plants in said field, but in spite of the continued action of the Commission, billions of cubic feet of natural gas has been vented into said field under competitive production practices; that the first thing to be done in the proposed plan is shut in the high gas-oil ration wells and to selectively produce the oil from the low gas-oil ratio wells, and this will have the effect of further decreasing the amount of gas produced in said field to a point where all gas produced in said field will be utilized either at the gasoline plants or sold; that the experience gained by the Corporation Commission in its attempt to regulate the production of oil and gas in said pool up to the present time has convinced it that the only practical method surbing the waste of natural gas is the granting of this application and the operation of the pool under unitized management.

16. That the Plan of Unitization hereto attached in all respects conforms to and complies with the requirements of H. B. 339 of the 1945 Oklahoma Legislature.

17. That the amended petition filed herein and pursuant to which this order is made conforms to and in all respects complies with the requirements of House Bill 339 of the 1945 Oklahoma Legislature.

BLEED THROUGH

BLURRED COPY

ORDER

IT IS THEREFORE ORDERED BY THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA AS FOLLOWS:

1. That the amended petition filed herein be and the same is hereby granted.

2. That the creation of the West Edmond Hunton Lime Unit as prayed in said amended petition be and the same is hereby authorized and approved.

3. That the Unit Area of said Unit shall extend to and include all of the West Edmond Hunton Lime common source of supply of oil and gas outlined by the hatched lines on the map marked "Exhibit A" attached to the Plan of Unitization attached to this order.

4. That the Plan of Unitization hereto attached and which by reference is made a part of this order is hereby approved and shall constitute the Plan of Unitization of and for said West Edmond Hunton Lime Unit and the Unit Area of said Unit, all to the same extent and with the same force and effect as if copied herein in its entirety.

5. Nothing herein contained shall be construed as a waiver by the Commission of any of its powers or authority over the West Edmond Hunton Lime Unit or the persons comprising said unit, or the development and operation of the Unit Area thereof under the general oil and gas conservation laws of the State of Oklahoma, it being expressly recited that the Commission has and retains continuing juris-

diction over the operations carried on by the Unit to the same extent that it would have jurisdiction over any other lessee or person producing oil and gas from the West Edmond Hunton Lime pool in the absence of unitization.

6. The unit shall from time to time make such reports to the Commission concerning the operation by it of the Unit Area as may be requested by the Commission.

7. The amount of overproduction charged against any tract within the Unit Area as of the effective date of said plan of Unitization shall be charged against and made up out of the unit production of oil allocated to such tract; that until such time as said tract's overproduction is made up, such overproduced tract shall not receive any part of the Unit production of oil; the Unit Operator shall each month file with the Corporation Commission a report by tracts of all overproduction so made up, together with a statement by tracts of the balance of the overproductions not so made up.

DONE AND PERFORMED by the Corporation Commission at its office in the Capitol Office Building, Oklahoma City, Oklahoma, this 29th day of July, 1947.

CORPORATION COMMISSION OF OKLAHOMA

Reford Bond, Chairman

Ray O. Weems, Vice-Chairman

Ray C. Jones, Commissioner

ATTEST:

Tom McMurray, Secretary

(SEAL)

BLEED THROUGH

BLURRED COPY

[7434]

PLAN OF UNITIZATION

of

WEST EDMOND HUNTON LIME UNIT

•

•••

•

Oklahoma, Canadian, Kingfisher
and Logan Counties, Oklahoma

[7435]

INDEX

Section		*Page*
I.	Definitions	1
II.	Name of Unit	3
III.	Unit Area	3
IV.	Separately Owned Tracts	3
V.	General Powers of Unit	3
VI.	Effect of Unitization	3
VII.	Allocation of Unit Production	5
VIII.	Operating Committee	6
IX.	Organization of Unit and Effective Date of Plan	11
X.	Unit Operator	12
XI.	Unit Expense	14
XII.	Initial Adjustment of Investment	17

Wells (Exclusive of Casing and Equipment) 17
Lease and Operating Equipment 18
Wells and Equipment of Non-Subscribers 19
Salt Water Disposal System 19
Separately Owned Tracts Not Credit With Wells 19

XIII. Oil in Lease Tankage as of Effective Date 19

XIV. Processing and Compression of Gas 20

XV. Plan of Operation 20

XVI. Right to Information Regarding Unit Operations 22

XVII. Liability 22

XVIII. Change of Interest 23

XIX. Audits 23

XX. Right of Way 23

[7436]

INDEX

Section *Page*

XXI. Claims, Suits and Judgments Against Individual Owners of Unit Area 23

XXII. Title Information 24

XXIII. Other Formations 24

XXIV. Abandonment of Wells 25

XXV. Abandonment of Operations and Dissolution of Unit 25

BLEED THROUGH

BLURRED COPY

XXVI. Amendment to Plan of Unitization and Enlargement of Unit 26

XXVII. Subscribers 26

****

EXHIBITS

EXHIBIT "A"—Map of Unit Area 32

EXHIBIT "B"—Table of Percentage Participation in the Unit 33

EXHIBIT "C"—Accounting Procedure 49

I. Development and Operating Charges 49

II. Basis of Charges to Unit Expense 52

III. Disposition of Surplus Materials and Equipments 53

IV. Inventories 53

EXHIBIT "D"—Processing and Compression of Gas 55

PART I—The Processing of Unit Gas by Phillips Petroleum Company and Continental Oil Company 56

I. Definitions 56

II. Plant Facilities 56

III. Quantity of Unit Gas Deliverable to Plant Owner 57

IV. Apportionment of Liquids 58

PART II—The Processing of Unit Gas by Peppers Refining Company 62

I. Definitions 62

II. Plant Facilities 62

[7437]

INDEX

EXHIBIT "D"—PART II (cont'd) *Page*

III. Delivery of Unit Gas to Plant Owner 63

IV. Apportionment of Liquid Products 64

V. Natural Gasoline to be Recovered by Plant Owner 65

PART III—Provisions Applicable Both to Phillips Petroleum Company and Continental Oil Company and to Peppers Refining Company 66

I. Applicability of Provisions 66

II. Plant Facilities 66

III. Delivery of Unit Gas 69

IV. Disposition of Unit Residue Gas 70

V. Delivery of Unit Production 73

VI. Taxes 74

VII. Natural Gasoline Recovered from Unit Gas 75

VIII. Measurements, Statements and Records 75

IX. Unit Option on Unit Residue Gas Injection 79

BLEED THROUGH

BLURRED COPY

X. Duration of Unit Gas Processing Arrangement and Option to Purchase Plant Facilities 80

XI. Audits 81

XII. Rights of Way 82

XIII. General Provisions 82

EXHIBIT "E"—Pilot Gas Injection Projects 83

*

*****

*

[7438]

PLAN OF UNITIZATION

OF

WEST EDMOND HUNTON LIME UNIT

KNOW ALL MEN BY THESE PRESENTS:

The following shall constitute the Plan of Unitization applicable to the West Edmond Hunton Lime Unit created pursuant to authority of House Bill 339 of the 1945 Legislature of the State of Oklahoma and having for its purpose the unitized management, operation and further development of the Hunton Lime common source of supply of Oil and Gas underlying the lands outlined by the hatched line on the map hereto attached and marked "Exhibit A", all to the end that a greater ultimate recovery of Oil and Gas may be had therefrom, waste prevented and the correlative rights of the respective owners protected.

I

DEFINITIONS

As used in this Plan of Unitization, the following terms and expressions are defined as follows:

(a) "Unit" shall mean the West Edmond Hunton Lime Unit.

(b) "Commission" shall mean the Corporation Commission of the State of Oklahoma.

(c) "Person" shall mean any individual, corporation, partnership, common law or statutory trust, association of any kind, the State of Oklahoma or any subdivision or agency thereof acting in a proprietary capacity, guardian, executor, administrator, fiduciary of any kind or any other entity capable of holding an interest in and to the Unit Area.

(d) The pronoun "it" is used to refer to any person regardless of gender.

(e) "Unit Production" shall mean and include all oil and Gas produced from the Unit Area from and after the Effective Date hereof regardless of the well or tract within the Unit Area from which the same is produced.

[7439]

(f) "Lessee" shall mean any owner, in whole or in part, of an Oil and Gas lease or any unleased mineral interest, who alone or in association with another person or persons has the right, except for this Plan of Unitization, to explore, develop and operate a Separately Owned Tract for Oil and Gas and in so doing would

BLEED THROUGH

BLURRED COPY

be personally chargeable with a proportionate part of the cost and expense of the operation thereof. An owner of an overriding royalty interest, oil payment, carried interest, net profit contract, or other oil and gas rights of a similar nature, who is not personally chargeable with the cost and expense of operations, shall not be regarded as a Lessee.

(g) "Unit Operator" shall mean and refer to the Lessee designated to carry on and conduct the Unitized Operations within the Unit Area as provided in Section X hereof.

(h) "Oil and Gas" shall not only refer to Oil and Gas as such in combination one with the other, but shall have reference to oil, gas, casinghead gas, casinghead gasoline or other hydrocarbons, or any combination or combinations thereof, or any one thereof, which may be found in or produced from the Unit Area.

(i) "Oil and Gas Rights" shall mean and include the right to explore, develop and operate lands within the Unit Area for the production of Oil and Gas, to reduce the same to possession or to share in the production so obtained or the proceeds thereof.

(j) "Effective Date" shall mean the date on which the Unit assumes and takes over the operation of the Unit Area as is provided in Section IX hereof.

(k) "Unit Expense" shall include any and all cost, expense or indebtedness incurred by the Unit or Unit Operator as authorized by this Plan of Unitization or the order of the Commission creating the unit.

(l) "Unqualified Subscribers" shall mean and refer to those Lessees who sign this Plan of Unitization

as Unqualified Subscribers as is provided for in Section XXVII hereof.

(m) "Qualified Subscribers" shall mean and refer to those Lessees who sign this Plan of Unitization as Qualified Subscribers as is provided for in Section XXVII hereof.

[7440]

II.

NAME OF UNIT

The name of the Unit created hereby shall be West Edmond Hunton Lime Unit.

III.

UNIT AREA

The Unit Area of the Unit shall extend to and include all of the Hunton Lime formation underlying the lands outlined by the hatched line on the map hereto attached, marked "Exhibit A" and made a part hereof, the same being a single common source of supply of Oil and Gas, located in Oklahoma, Logan, Kingfisher and Canadian Counties, Oklahoma.

IV.

SEPARATELY OWNED TRACTS

Each well spacing or drilling unit as defined and established by Order No. 17082 of the Corporation Commission entered in Cause C. D. No. 894 and located within the Unit

BLEED THROUGH

BLURRED COPY

Area shall be defined, regarded and treated as a Separately Owned Tract within the purview of this Plan of Unitization. The Separately Owned Tracts as so defined and established are shown on the map hereto attached and marked "Exhibit A" and are for convenient identification numbered thereon and may be referred to by number.

V.

GENERAL POWERS OF UNIT

The Unit is authorized and empowered on behalf and for the account of all the Lessees within the Unit Area, without profit to the Unit, to supervise, manage and conduct the further development and operation of the Unit Area for the production of Oil and Gas, pursuant to the powers conferred and subject to the limitations imposed by the provisions of House Bill 339 of the 1945 Session of the Oklahoma Legislature and by this Plan of Unitization.

VI.

EFFECT OF UNITIZATION

The adoption of this Plan of Unitization and the creation of the Unit as herein provided shall have the effect from and after the Effective Date hereof of unitizing all further development and

[7441]

operations for the production of Oil and Gas from the Unit Area and of pooling and unitizing the production so obtained, all to the same extent as if the Unit Area had been included in a single lease and all rights thereunder owned

by the Lessees in undivided interests. Property rights, leases, contracts and all other rights and obligations in respect of the Oil and Gas Rights in and to the several Separately Owned Tracts within the Unit Area are hereby amended and modified to the extent necessary to make the same conform to the provisions and requirements of this Plan of Unitization, but otherwise to remain in full force and effect.

The relationship between the Lessees within the Unit Area, resulting from the creation of the Unit shall not be that of a trust, partnership or association but shall be in the nature of a tenancy in common.

Nothing herein contained shall be construed to require or result in a transfer to or the vesting in the Unit of title to the separately Owned Tracts within the Unit Area or to the leases thereon, other than the right to use and operate the same to the extent set out in this Plan of Unitization; nor shall the Unit be regarded as owning any of the Unit Production. The Unit Production and the proceeds from the sale thereof shall be owned by the several persons to whom the same is allocated under this Plan of Unitization. All property, real or personal, acquired, held or possessed for use in the operation of the Unit Area shall be the property of the Lessees as their interests may appear under this Plan of Unitization, subject, however, to the rights and powers herein granted the Unit and the Unit Operator.

The amount of the Unit Production allocated to each Separately Owned Tract and only that amount, regardless of the well or wells in the Unit Area from which it may be produced, and regardless of whether it be more or less than the amount of the production from the well or wells, if any, on any such Separately Owned Tract shall, for all intents, uses and purposes, be regarded and considered as production from such Separately Owned Tract.

BLEED THROUGH

BLURRED COPY

Operations carried on, under and in accordance with this Plan of Unitization shall be regarded and considered as a fulfillment of and compliance with all the provisions, covenants and conditions, express or implied, of the several oil and gas mining leases upon lands included within the Unit Area, or other contracts pertaining to the development thereof, to the same extent that the development and operation of and the production of Oil and Gas from each of the several Separately Owned Tracts within the Unit Area would have constituted a fulfillment of and compliance with such leases and contracts. Wells drilled or operated on any part of the Unit Area, no matter where located, shall for all purposes be regarded as wells drilled on each Separately Owned Tract within the Unit Area.

[7442]

VII.

ALLOCATION OF UNIT PRODUCTION

All Unit Production, except so much thereof as is used in the development and operation of the Unit Area, including repressuring, pressure maintenance and other operations carried on in accordance with this Plan of Unitization, or is unavoidably lost, shall be apportioned among and allocated to the several Separately Owned Tracts within the Unit Area in accordance with the percentage and division of interest set forth and shown in "Exhibit B" hereto attached and made a part hereof.

Except as may be otherwise authorized or provided in this Plan of Unitization, the Unit Production allocated to each Separately Owned Tract shall be distributed among or the proceeds thereof paid to the several persons entitled to share in the production from such Separately Owned

Tract in the same manner, in the same proportions, and upon the same conditions that they would have participated and shared in the production from such Separately Owned Tract, or the proceeds thereof, had not the Unit been organized, and with the same legal force and effect.

Except as may be otherwise authorized or provided in this Plan of Unitization, and provided adequate provisions are made for the receipt thereof, the share of the Unit Production allocated to each separately Owned Tract shall be delivered in kind to the persons entitled thereto by virtue of ownership of oil and Gas Rights therein or by purchase from such owners, subject, however, to the right of the Unit Operator to withhold and sell the same in payment of Unit Expense pursuant to this Plan of Unitization, and subject further to the right of the Unit Operator to take and use a portion thereof as hereinafter provided. Persons so entitled to take and receive in kind any portion of the Unit Production shall have the right to construct, maintain and operate within the Unit Area all necessary facilities for that purpose, provided the same are so constructed, maintained and operated as not to interfere with the operations carried on pursuant hereto.

To the extent that any person entitled to take and receive in kind any portion of the Unit Production shall fail to take and receive the same currently as and when produced, the Unit Operator, as agent and for the account and at the expense of such person, is authorized to market and sell or itself purchase, at not less than the market price prevailing at the time of such sale or purchase, the portion of Unit Production not so taken in kind by the person entitled to take and receive the same. Proceeds of the Unit Production so sold, or purchased by the Unit Operator, shall be paid by the Unit Operator to the person or persons for whose account the same is so marketed.

BLEED THROUGH

BLURRED COPY

The person or persons receiving in kind the Unit Production allocated to any Separately Owned Tract or receiving the proceeds of such Unit Production, if the same is sold or purchased by the Unit Operator, shall be responsible for the payment of, and shall indemnify the Unit, the other Lessees and the Unit Operator against any liability for, any and all royalties, overriding royalties, production payments, gross production taxes and any and all other payments and taxes chargeable against or payable out of the Unit Production which is received in kind by, or the proceeds of which are paid to, such person or persons, and neither the Unit nor the Unit Operator shall have any responsibility or liability for payment of such royalties, overriding royalties, production payments, gross production taxes or the other payments or taxes.

If at any time the title or right of any person claiming the right to receive in kind all or any portion of the Unit Production allocated to a Separately Owned Tract is in dispute or is disapproved by the Unit Operator, the Unit Operator in its discretion may either (a) withhold and market, or itself purchase the portion of the Unit Production, title to which is in dispute or is disapproved, and impound the proceeds thereof until such time as the title of right thereto is established, by final judgment of a court of competent jurisdiction or otherwise to the satisfaction of the Unit Operator, whereupon, the proceeds so impounded shall be paid, without interest, to the person or persons rightfully entitled thereto, or (b) may require that the person or persons to whom such Unit Production is delivered, or to whom the proceeds thereof are paid, furnish security for the proper accounting therefor to the rightful owner or owners in the event the title or right of such person or persons shall fail, in whole or in part.

Subject to the limitations and conditions set out in "Exhibit D" hereto attached with respect to residue gas, the Unit Operator shall have the right to take and utilize so much of the Unit Production as may be necessary or desirable in the development and operation of the Unit Area, including but without being limited to, the use of gas for repressuring, pressure maintenance or other operations carried on in accordance with this Plan of Unitization. No royalties, overriding royalties, production payments or other payments (other than as may be provided in "Exhibit D" hereto attached) shall be payable upon or with respect to that portion of the Unit Production so taken and utilized by the Unit Operator or which may be lost in handling or otherwise without want of due diligence on the part of the Unit Operator.

VIII.

OPERATING COMMITTEE

(1) An Operating Committee is hereby created to consist of one representative to be designated by each Lessee within the Unit Area, pro-

vided that an individual Lessee may himself be a member of the Committee. Such designation shall be in writing and with respect to the representative to participate at the organization meeting of the Committee shall be presented at such meeting, or if thereafter made, shall be filed with the Secretary of the Operating Committee. Any such Lessee may in like manner (a) designate an alternate representative on the Operating Committee, who, in the absence of the Lessee or its regular representative, shall have the same full

BLEED THROUGH

BLURRED COPY

right and power to represent the interest of such Lessee, or (b) may from time to time discharge any such regular or alternate representative and designate a new representative to act for such Lessee on the Operating Committee.

(2) The Operating Committee shall have the general overall management and control of the Unit and the conduct of its business and affairs and the operations carried on by it, and is authorized and empowered, subject to the terms and provisions hereof, to do all things necessary, proper and convenient for carrying out the terms and spirit of this Plan of Unitization and to that end, not excluding or limiting any other power or powers that may be necessary or proper for that purpose, shall have the following specific powers and duties:

(a) To adopt rules and regulations for the proper functioning of the Operating Committee, including such matters as the time and places of holding meetings, the calling thereof or the manner of taking the vote on any question all in a manner not inconsistent with the express requirements of this Plan of Unitization.

(b) To remove any Unit Operator.

(c) To select a successor to any Unit Operator.

(d) To determine the extent of drilling operations and development to be carried on by the Unit Operator, including the approval or disapproval of the contemplated drilling, deepening, plugging back, reconditioning, abandonment or the use to be made of any well or wells.

(e) To pass upon and approve or disapprove all costs and estimates of costs and any proposed expenditure by the Unit Operator; provided, that the Committee may permit without prior approval by it the incur-

ring of normal operating expense and any proposed expenditure by the Unit Operator of not more than Five Thousand ($5,000.00) Dollars; and provided further that the approval by the Operating Committee of the drilling of any well or wells or carrying out any specific project of development or operation shall mean and include the approval of all necessary expenditures in drill-

[7445]

ing, completing and equipping such well or wells or carrying out such project.

(f) To determine from time to time the rate at which and the wells from which the Unit Production shall be produced in conformity with good engineering practices and any applicable conservation laws or regulations.

(g) To pass upon, approve or disapprove the purchase, sale or other disposal of materials and equipment by the Unit Operator otherwise than in the normal course of approved operations.

(h) To approve and authorize the purchase, construction, location, abandonment, sale or other disposal of any compressor plant, gasoline plant, tank batteries, salt water disposal system or other facilities serving the Unit Area.

(i) To determine the manner in which, the location at which and the extent to which gas can best and should be injected into the reservoir to accomplish the Plan of Operation set forth in Section XV hereof.

(j) To provide for the proper auditing of the accounts of the Unit Operator with respect to the operation and development of the Unit Area.

BLEED THROUGH

BLURRED COPY

(k) To appoint such subcommittees as it may deem proper and requisite, as for example, an advisory committee, legal committee, engineering committee, plant committee, geological committee and tax committee to act under the authority and subject to the control of the Operating Committee consonant with the terms of this Plan of Unitization.

(l) To approve or disapprove any proposed plan of development or operation or amendment thereof required to be submitted to any regulatory body having jurisdiction of the subject matter thereof.

(m) To approve or disapprove any proposed expenditures for expert technical advice, including any extra services rendered by the Unit Operator's technical staff, not contemplated by the provisions of the accounting procedure hereto attached, marked "Exhibit C" and not covered by the overhead charges therein authorized, which overhead charges in said accounting procedure are intended to cover only normal lease development and lease operations.

[7446]

(n) To direct and consult with the Unit Operator in all matters pertaining to the duties and functions of the Unit Operator.

(o) To provide for the finances in the manner herein provided for the carrying on of the Unit Operations hereunder.

(3) Each Lessee within the Unit Area who is represented on the Operating Committee shall have a vote equal to the proportionate interest of said Lessee in the Unit determined as follows:

(a) In respect of each Separately Owned Tract, the Lessee or Lessees thereof shall have a vote equal to the percentage indicated opposite such Separately Owned Tract in "Exhibit B" hereto attached.

(b) Should there be more than one Lessee of a Separately Owned Tract, the vote in respect thereof shall be divided between such Lessees in proportion as such Lessees share in the Unit Expense chargeable to such tract.

(c) The vote of a Lessee having an interest in more than one Separately Owned Tract shall be the sum total of the votes of such Lessee in respect of all such tracts.

(4) Except as hereinafter provided, all action of the Operating Committee shall be by vote on behalf of Lessees having a majority of the voting interest in the Unit.

(5) The affirmative vote on behalf of Lessees having 66-2/3% of the total voting interest in the Unit shall be necessary to authorize the following action:

(a) The removal of a Unit Operator.

(b) The expenditure of more than $100,000.00 for any one purpose, project or activity, exclusive of normal operating expenses.

(c) The abandonment of operations and dissolution of the Unit as provided in Section XXV hereof.

(6) Notwithstanding the percentage of voting interest which may be voted in favor thereof, the Unit shall not take any of the following actions if the vote on behalf of Lessees having 15% or more of the voting interest in the Unit is voted against the taking thereof:

BLEED THROUGH

BLURRED COPY

(a) The expenditure of more than $500,000.00 for any one purpose, project or activity, exclusive of normal operating expenses.

(b) The extension of the gas injection project described in "Exhibit E" hereto attached.

(c) The construction, purchase or other acquisition of a plant or plants for the processing of gas (including casinghead gas) for the extraction of liquefied hydrocarbons therefrom or for the conversion of gas into liquefied hydrocarbons.

The Operating Committee shall not vote on any of the actions the taking of which may be prevented by a vote on behalf of Lessees having 15% or more of the total voting interest in the Unit Area unless written notice of the time and place of the meeting and the actions to be so considered is first given to all Lessees within the Unit Area at least ten (10) days in advance of the date of the meeting.

(7) Due notice of any meeting of the Operating Committee shall be deemed to have been given to a Lessee within the Unit Area if any when such notice is deposited in the United States mails addressed to such Lessee at the address shown on the records of the Operating Committee at the time such notice is mailed as being the address of such Lessee, or, if the address of a Lessee is not shown on the records of the Operating Committee, to the last known address of such Lessee.

(8) If at any time the voting interest of a Lessee should be such as to control the action taken by the Committee, the vote of such Lessee shall not serve to carry or defeat action taken by the Committee unless such vote is supported by the vote of a majority in interest of the remaining Lessees.

(9) Minutes shall be made of all meetings of the Operating Committee and kept as a part of the permanent records of the Unit. Such minutes need not be a verbatim record of all the proceedings, but shall show and reflect (a) the names of all members present at the meeting; (b) all motions and resolutions offered or acted upon, together with the result of such action; and (c) such other formal action as may be taken by the Committee. A copy of the minutes of each such meeting shall be mailed to each member of the Committee within a reasonable time after the meeting.

(10) Notices or other communications addressed and sent to the Unit or to the Operating Committee by United States mail or telegraph in care of the Unit Operator shall be deemed to have been properly given to or served upon the Operating Committee. The Unit Operator shall promptly deliver all such notices or communications to the Chairman or Secretary of the Operating Committee.

[7448]

IX.

ORGANIZATION OF UNIT AND EFFECTIVE DATE OF PLAN

Subject to call by Lessees of record owning 50% or more in interest in and to the Unit as shown in "Exhibit B" hereto attached, the representatives designated by the several Lessees to serve on the Operating Committee shall meet at some convenient place to perfect the organization of the Operating Committee. Such meeting may be held at any time after twenty (20) days from the entry of the order of the Commission approving this Plan of Unitization. Notice of the time and place of said meeting shall be mailed at

BLEED THROUGH

BLURRED COPY

lease ten (10) days prior thereto to all Lessees within the Unit Area whose names and addresses are known to the Lessees calling said meeting, as ell as those Lessees who shall have within ten (10) days from the entry of said order notified the Secretary of the Commision in writing of their desire to be no notified of the meeting. Any Lessee within the Unit Area desiring notice of such meeting may file a statement of such desire with the Secretary of the Commission, giving its name and the address to which it desires the notice to be sent.

The Operating Committee shall organize by selecting a Chairman, a Vice-Chairman, a Secretary and such other officers as to the Committee may seem proper. The Chairman and Vice-Chairman shall be selected from among the members of the Operating Committee. The Secretary and other officers may or may not be members of the Committee. The Chairman shall preside at all meetings of the Operating Committee when he is present and shall be the Chief Executive Officer of the Unit. The Vice-Chairman shall perform all duties of the Chairman in the absence of the Chairman. The Secretary shall keep and maintain all the records of the Committee and shall also be Secretary of the Unit. Such officers shall serve at the will of the Operating Committee and perform such other duties as are delegated to them by the Operating Committee.

Upon completion of its organization, the Operating Committee shall proceed to make plans and preparations and take such steps as are necessary for the taking over of the unitized operations and further development of the Unit Area by the Unit, and shall in advance thereof fix the time when the Unit will take over such operation and development, and give the Lessees within the Unit Area reasonable notice thereof. The time so fixed shall not be less

than sixty-one (61) days after the entry of the order of the Commission approving this Plan of Unitization nor more than three months after the time when said order shall have become final.

The time when the Unit takes over the operation and further development of the Unit Area shall be the Effective Data of this Plan of Unitization.

[7449]

In the event the Unit shall fail to assume and take over the operation of the Unit Area on or before three (3) months after the time when the order of the Commission approving this Plan of Unitization shall have become final, then and in that event the Unit shall, without further action on the part of the Operating Committee or the Commission, be dissolved and all rights and obligations under this Plan of Unitization shall be at an end, except that any and all cost and expense incurred by the Unit incident to its organization or preparatory to the taking over of the operation of the Unit Area shall be borne and paid for by the Lessees whose representatives on the Operating Committee by their vote authorizing the incurring of such expense, in proportion as the interest of each such Lessee in and to the Unit as set out in "Exhibit B" bears to the total interest of all such Lessees in and to the Unit as shown on said "Exhibit B". In the event the Unit assumes and takes over the operation of the Unit Area within the time so named, this Plan of Unitization shall thereafter remain in force and effect until such time as the Unit is dissolved and abandoned as provided in Section XXV hereof.

The order of the Commission approving this Plan of Unitization shall be regarded as having become final at the end of the time allowed by law for any appeal therefrom, if

BLEED THROUGH

BLURRED COPY

no appeal is taken, or, if an appeal is taken, then upon the final determination of any such appeal.

The Unit on or before five (5) days after the Effective Date hereof shall submit to the County Clerks of Oklahoma, Logan, Kingfisher and Canadian Counties, Oklahoma, for filing, a written declaration signed by the Chairman and Secretary of the Operating Committee, setting forth

(a) The hour, day and year on which the Unit took over the operation of the Unit Area;

(b) A description or plat of the lands included within the Unit Area; and

(c) The cause number and date of the Commission order approving this Plan of Unitization, with an appropriate reference to such order and the files of the Commission for further information concerning this Plan of Unitization.

X.

UNIT OPERATOR

Subject to the further provisions of this Plan of Unitization, operations in connection with the development and the operation of the Unit Area for Oil and Gas shall be carried on and conducted by a Unit Operator in accordance with the instructions of the Operating Committee.

[7450]

The Unit Operator shall:

(a) Conduct all such operations in a good and workmanlike manner.

(b) Keep full, true and correct books, accounts and records of its operations hereunder which shall be made available for inspection at all reasonable times by any of the Lessees within the Unit Area.

(c) Mail to each Lessee on or before the 10th day of each calendar month a full, true and correct statement of all oil produced from the Unit Area during the next preceding calendar month, the amount delivered to each Lessee or other persons entitled thereto during such preceding month and the amount on hand in Unit tankage as of 7 o'clock A. M. on the 1st day of the month in which such statement is made.

(d) Mail to each Lessee on or before the last day of each calendar month a full, true and correct statement of all gas produced from the Unit Area and processed, sold or otherwise utilized during the next preceding calendar month.

(e) Comply, to the extent of its operations within the Unit Area, with the Workmen's Compensation Laws of the State of Oklahoma and with all other valid and applicable federal and state laws and regulations.

(f) Carry such insurance as may be required by the Operating Committee.

(g) Render and pay all ad valorem taxes payable on property owned jointly by the Lessees and such other taxes as may be specifled by the Operating Committee.

(h) Keep the land and leases within the Unit Area free from liens and encumbrances occasioned by the operations of the Unit Operator save ony the lien granted the Unit and the Unit Operator under this Plan of Unitization.

BLEED THROUGH

BLURRED COPY

The Operating Committee may remove a Unit Operator at any time. A Unit Operator may resign only after giving the Operating Committee six months' written notice of its intention to resign, or sooner if a successor is selected and has assumed the duties of Unit Operator prior to the end of such time. Upon the removal or resignation of a Unit Operator the Operating Committee shall designate a successor Unit Operator from among the Lessees within the Unit Area.

Sohio Petroleum Company is hereby designated as Unit Operator.

[7451]

XI.

UNIT EXPENSE

The Unit Operator in the first instance shall pay and discharge all cost and expense incurred in the development and operation of the Unit Area and in the conduct of the activities and affairs of the Unit. All such cost and expense incurred in the development and operation of the Unit Area shall be in accordance with the Accounting Procedure hereto attached, marked "Exhibit C" and made a part hereof. All other costs and expense shall be only such sums as are approved by the Operating Committee.

All such Unit Expense as it accrues shall be charged to the several Separately Owned Tracts in the Unit Area in proportion to the percentage of interest of such tracts in and to the Unit as set forth and shown in "Exhibit B" hereto attached.

Except as may be otherwise hereinafter specifically provided, a Lessee or Lessees obligated or responsible for

the cost and expenses of operating a Separately Owned Tract for Oil and Gas in the absence of unitization shall, in the same proportion and to the same extent, be chargeable with and responsible for the payment of the Unit Expense charged against such Separately Owned Tract.

On or before the last day of each calendar month, the Unit Operator shall mail to each Lessee within the Unit Area a statement of all charges and credits for the preceding calendar month (which statement shall itemize all charges and credits to investment account and shall properly classify all other charges and credits) and of the amount due from or to each Lessee in respect of its interest in the Unit Area. If the Unit Operator so elects, such statement of account may also include a charge by way of an advance of the proportionate part of the estimated Unit Expense for the ensuing month chargeable to the Lessee against whom such statement is rendered, using as a basis therefor the budget hereinafter provided for. Except as may be otherwise provided herein, each Lessee chargeable with the payment thereof shall, within fifteen (15) days from the mailing of such statement, pay to the Unit Operator the amount thereof. If not paid when due, the unpaid balance shall bear interest at the rate of 6% per annum until paid. Payment of any such statement shall not prejudice the right of any Lessee to protect or question the correctness thereof; provided, the Unit Operator shall not be required to adjust any item of charge or credit unless a claim therefor has been presented in writing within six (6) months after the approval by the Operating Committee of the annual audit for the period in which the charge or credit was made.

Before or as soon as practical after the Effective Date hereof, the Operating Committee, acting in conjunction with the Unit Operator,

BLEED THROUGH

BLURRED COPY

shall prepare a budget of estimated Unit Expense for the remainder of the calendar year and on or before the first day of each December thereafter shall prepare a budget of estimated Unit Expense for the ensuing calendar year, which budgets shall set forth the estimated Unit Expense by quarterly periods. Unless otherwise specified in the budget, it shall be presumed for the purpose of advance billings as aforesaid, that the estimated Unit Expense for each month of a quarterly period shall be one-third (1/3) of the estimate for the quarterly period. Budgets so prepared shall be estimates only and shall be reviewed by the Operating Committee and Unit Operator at least once each quarter and adjusted and corrected if it shall appear that an adjustment or correction is proper. A copy of each such budget and adjusted budget shall be promptly furnished each Lessee within the Unit Area.

Any Lessee, other than an Unqualified Subscriber, who does not elect to pay its proportionate share of the Unit Expense, shall not be personally obligated for the payment thereof, but the amount thereof or such portion thereof as such Lessee shall elect not to pay, together with interest thereon at the rate of 6% per annum, shall be carried and shall be payable, so far as such Lessee is concerned, as follows:

(a) So much of said charges as is made up of current operating costs, as distinguished from items of investment, together with interest thereon, shall be payable out of proceeds from all Unit Production to the credit of the interest or interests therewith.

(b) So much of said charge as is made up of items of investment, together with interest thereon, shall be payable out of 50% of the net proceeds of the Unit

Production to the credit of the interest or interests chargeable therewith after deducting the charge for Operating costs under subparagraph (a) last above.

(c) All credits to any such Lessee on account of the sale or other disposal of surplus material or equipment or otherwise shall be applied against any such unpaid Unit Expense charged against such Lessee.

Amounts so carried as aforesaid, shall be billed to and paid by the Lessees who sign this Plan of Unitization as Unqualified Subscribers, in the proportion that the interest of each in the Unit bears to the total interests in the Unit of all of the Unqualified Subscribers to this Plan of Unitization, Lessees so paying the same shall be reimbursed therefor, together with interest thereon, as and when the amounts so carried and the interest thereon are collected from the the credit of the interest or interests chargeable therewith.

[7453]

The Unit shall have a first and prior lien upon the leasehold interest (exclusive of a 1/8 royalty interest) in and to each Separately Owned Tract, the interest of the owners thereof in and to the Unit Production and all equipment in possession of the Unit, to secure the payment of the Unit Expense and other items of cost charged to and against such Separately Owned Tract, provided such lien may be enforced as against overriding royalty, oil and gas payments, royalty interests in excess of a 1/8 of the production, or other interests which otherwise are not chargeable with such costs, only in the event the owner of the interest or interests primarily responsible fails to pay such Unit Expense when due, and the production to the credit thereof is insufficient for that purpose. In the event the owner of any

BLEED THROUGH

BLURRED COPY

royalty interest, overriding royalty, oil and gas payment or other interest which under the Plan of Unitization is not primarily responsible therefor pays and part of such Unit Expense for the purpose of protecting such interest or the amount of such Unit Expense in whole or in part is deducted from the Unit Production to the credit of such interest, the owner thereof shall, to the extent of such payment or deduction, be subrogated to all of the rights of the Unit and of the Unit Operator with respect to the interest or interests primarily chargeable with such Unit Expense. A one-eighth (⅛) part of the Unit Production allocated to each Separately Owned Tract shall in all events be regarded as royalty to be distributed to and among the proceeds thereof paid to the royalty owners free and clear of all Unit Expense and free of any lien therefor. The lien hereinabove provided for shall be for the use, benefit and protection of Unit Operator or other Lessees or persons entitled to receive or share in the monies, the payment of which is secured thereby, and in the event of failure of the Unit to enforce such lien, the Unit Operator or other person entitled to the benefit thereof, shall be subrogated to the lien rights of the Unit, including the right of foreclosure.

In the event of a failure of any Lessee to pay its share of the Unit Expense when due, and also in the case of a Lessee who elects to be carried as aforesaid, the Unit Operator shall be entitled to take and market, or itself purchase the Unit Production to the credit of such Lessee or to the credit of the interest or interests chargeable with or subject to the lien of such Unit Expense, or to otherwise collect and receive the proceeds from the sale thereof, and shall apply all such sums so collected against the delinquent or unpaid Unit Expense due from such Lessee or interest, the balance of such proceeds, if any, to be paid to the Lessee or other person entitled thereto. The Unit Operator may like-

wise take any other credit due any such Lessee or interest and apply the same against sums due from such Lessee or interest for Unit Expense.

Any and all income and credits received by Unit Operator on account of Unit Operations hereunder, from whatever source received, shall currently be accounted for and credited to the Lessees or interests entitled to credit therefor.

[7454]

XII.

INITIAL ADJUSTMENT OF INVESTMENT

Upon the Effective Date hereof the Unit shall assume control and management of the further development and operation of the Unit Area, and, except as may be otherwise herein provided, each Lessee within the Unit Area shall deliver possession to the Unit Operator of (a) all wells within the Unit Area, (b) all lease and other operating equipment used in the operation of such wells, and (c) all production and well records and other pertinent data pertaining thereto.

1. *Wells (Exclusive of Casing and Equipment)*

Each separately Owned Tract on which is located, on the Effective Date, a producing well in the Hunton Lime Formation shall be given credit for a completed well.

Any well being drilled, repaired, deepened or plugged back to the Hunton Lime Formation within the Unit Area on the Effective Date may be completed by the Lessee or Lessees of the Separately Owned Tract on which such well is located and upon the completeion thereof as a producing

BLEED THROUGH

BLURRED COPY

well in the Hunton Lime Formation the Separately Owned Tract shall be given credit for a completed well.

For the purpose of adjustment of well investment, as hereinafter provided, the cost of drilling and completing (exclusive of casing, tubing and other equipment) a well within the Unit Area shall be deemed to be Fifty Thousand Dollars ($50,000), and the total cost of drilling and completing (exclusive of casing, tubing and other equipment) all wells within the Unit Area shall be the sum of Fifty Thousand Dollars ($50,000) multiplied by the number of completed wells credited to Separately Owned Tracts pursuant to the next two preceding paragraphs hereof.

Each Separately Owned Tract which is not credited with a completed well as aforesaid, shall be charged with a percentage of said total cost of drilling and completing (exclusive of casing, tubing and equipment) all wells within the Unit Area, equal to the percentage of interest of such Separately Owned Tract in the Unit as shown in "Exhibit B" hereto attached. The amount of such charge shall be paid, draw interest and in other respects be treated and regarded as any other item of Unit Expense charged against such a Separately Owned Tract, except, that unless the Lessee or Lessees thereof shall elect to voluntarily pay the same, the amount of such charge, together with the interest thereon, shall, both as to Qualified and Unqualified Subscribers, be payable only out of the proceeds of Unit Production to the credit of such Tract. Amounts so collected on account of any such charge so made against Separately Owned Tracts not credited with completed wells, as aforesaid, shall be credited in equal amounts to the Separately Owned

[7455]

Tracts given credit for completed wells, as aforesaid, and

paid to the Lessees thereof in proportion to the ownership of such Lessees in and to such wells.

Except as hereinabove provided, no remuneration shall be paid by or to the Lessee or Lessees of any Separately Owned Tract on account of wells (exclusive of casing, tubing and other equipment) drilled or being drilled within the Unit Area on the Effective Date.

2. *Lease and Operating Equipment*

As of the Effective Date hereof all lease and other operating equipment (exclusive of warehouses, lease houses, camps and office buildings) used in the operations of wells taken over by the Unit, including by way of example, but not thereby excluding, other equipment of a like or different kind, casing and tubing in the wells, derricks, tank batteries, separators, rods, pumps, flow lines, water lines, gas lines, etc., shall be delivered to and taken over the by the Unit. All equipment not so taken over shall remain the separate property of the several owners thereof. The acquisition of existing warehouses, lease houses, camps, or office buildings considered desirable to the operation and development of the Unit Area shall be by negotiation and separate contract of purchase with the owner or owners of such warehouses, lease houses, camps and offiice buildings.

An accounting for the lease and operating equipment so transferred to and taken over by the Unit shall be had as between the owners thereof and all Lessees within the Unit Area, on the basis of the value thereof, determined as follows:

(a) Tubular goods (2" and over), fittings, machinery and other equipment in sound and serviceable condition shall be valued at 75% of the price of new materials of like kind.

BLEED THROUGH

BLURRED COPY

(b) Tanks, derricks, buildings and other equipment involving erection costs shall be valued at not more than 75% of knocked down new prices for the materials comprised therein.

(c) Other materials, machinery and equipment in serviceable condition but requiring repair or reconditioning shall be valued at 50% of new prices for like materials.

(d) For the purposes of said valuation, the prices of new materials shall be determined on the basis of prices prevailing on the Effective Date at the nearest reliable supply stores or f. o. b. railway receiving point, and proper charges and credits entered against the several Separately Owned Tracts, all to the end that on and after the Effective Date hereof each of the several Lessees within the Unit Area instead of separately owning the equipment delivered to the Unit by such Lessees, will

[7456]

have exchanged the same for an undivided interest in and to all the equipment so taken over and acquired by the Unit and will have paid or have been paid, as the case may be, for any difference in value. The amount of any net charge made against a Separately Owned Tract under this paragraph shall be treated and regarded in all respects the same as any other charge for Unit Expense chargeable to such tract.

3. *Wells and Equipment of Non-Subscribers*

Notwithstanding the foregoing provisions, the Unit shall not take over the well or wells or lease and operating equipment of any Lessee who has not subscribed to this Plan of

Unitization without the consent of such Lessee, except to the extent permitted by law. However, from and after the Effective Date, any such well or wells not taken over by the Unit shall not be operated by the owner or owners thereof for the production of Oil and Gas from the Unit Area, and the Separately Owned Tract on which any such well is located shall not be given credit for a completed well pursuant to subdivision 1 hereof unless and until such well is transferred to the Unit as a producing well in the Hunton Lime formation.

4. *Salt Water Disposal System*

The Salt Water Disposal System of the West Edmond Salt Water Disposal Association shall be taken over by the Unit at a valuation equal to the actual cost thereof to said Association, and the several Separately Owned Tracts shall be charged therewith on the basis of their respective percentage interests in the Unit as shown on said Exhibit "B" and the Lessees who are members of said Association shall be credited therewith in proportion to their respective interests in said System.

5. *Separately Owned Tracts Not Credited With Wells*

The entire net proceeds of Unit Production accruing to the interest or interests chargeable with Unit Expense charged against a Separately Owned Tract not credited with a completed well, as above provided, and remaining after payment of current operating expenses charged against such tract, shall be applied in payment of the charges herein provided to be made against such tract with respect to well investment and lease and operating equipment and the salt water disposal system.

BLEED THROUGH

BLURRED COPY

XIII.

OIL IN LEASE TANKAGE AS OF EFFECTIVE DATE

A proper and timely gauge shall be made of all lease or other tanks taken over by the Unit to ascertain the amount of oil in such tanks

[7457]

at the time the Unit assumes and takes over the development and operation of the Unit Area. So much of such oil as is legally produced shall remain and be the property of the parties entitled thereto had not the Unit been created, and upon request, shall be delivered in kind to persons entitled thereto, or in the absence of such request, shall be sold by the Unit Operator for the credit of such persons at not less than the prevailing market price and the proceeds thereof paid to such persons.

XIV.

PROCESSING AND COMPRESSION OF GAS

The gas produced from the Unit Area, except so much thereof as is used in the development and operation of the Unit Area without being processed or is unavoidably lost, shall be processed and the products thereof, including both liquid products and residue gas, distributed and handled in the manner set out in Exhibit "D" hereto attached and made a part hereof.

XV.

PLAN OF OPERATION

From and after the effective date hereof the Unit Area shall be developed and operated as a unit as follows:

(a) As soon as reasonably practicable after the Effective Date hereof and before any more extensive pressure maintenance operations are carried on, the Unit shall make the necessary preparations therefor and with diligence and in accordance with the requirements of Exhibit "E" hereof establish and engage in the pilot gas injection projects therein described to determine the extent to which, the manner in which, the conditions under which and the location or locations at which gas can best be injected into the Unit Area for the efficient recovery within economic limits of the greatest quantities of oil therefrom.

(b) Pending a determination of the results of the pilot gas injection projects referred to in Paragraph (a) above and until a pressure maintenance program is inaugurated, wells making water shall in accordance with good engineering practice be so produced as to minimize water encroachment into the Unit Area. Thereafter, the production of Oil and Gas from the different parts of the Unit Area shall be regulated in such manner as to retard, control or effectively utilize such water encroachment, in such manner and to such extent as may be found reasonably possible and economically advisable from time to time.

[7458]

(c) To the extent and in the manner determined by the Operating Committee to be economically profitable on the basis of the information developed by the aforesaid pilot gas injection projects, and subject to the provisions of subsection 6 of Section VIII of this Plan of Unitization and Exhibit "E" hereto attached, pressure maintenance or repressuring operations through the return of gas to the reservoir may, in accordance

BLEED THROUGH

BLURRED COPY

with good engineering and production practices, be engaged in by the Unit.

(d) The oil produced from the Unit Area shall be produced from those wells in the Unit Area from which the same can be obtained with the smallest loss or dissipation of reservoir energy reasonably possible under practical operating conditions as they may exist from time to time.

(e) Gas wells and wells which produce oil with gas-oil ratios found to be excessive in relation to the gas-oil ratios of other wells producing oil from the Unit Area shall be shut in or the production therefrom restricted in such manner as to make the most effective utilization of the gas energy of the reservoir reasonably possible under practical operating conditions as they may exist from time to time.

(f) Gas (other than gas produced in connection with the production of oil) shall be produced from the Unit Area only at such time or times and in such manner as in the judgment of the Operating Committee such gas may be produced without materially decreasing the quantity of oil economically recoverable from the Unit Area.

(g) Such other unitized method or methods of operation as may from time to time be determined by the Operating Committee to be feasible, necessary or desirable to efficiently and substantially increase the ultimate recovery of Oil and Gas from the Unit Area, provided the estimated additional cost thereof does not exceed the value of the additional Oil and Gas to be so recovered.

Except as otherwise provided in paragraph (a) above or in Exhibit "E" with respect to the pilot gas injection projects, nothing contained herein shall prevent the Unit from abandoning or changing in whole or in part any particular method or methods of operation, if and in the event, at such time, and to the extent that any such method of operation as applied to the Unit Area is, in the best judgment of the Operating Committee, no longer in accord with good engineering or production practices.

[7459]

XVI.

RIGHT TO INFORMATION REGARDING UNIT OPERATIONS

Each and all Lessees within the Unit Area shall have access to the entire Unit Area at all reasonable times to inspect and observe operations of every kind and character on the property, and shall have access at all reasonable times to any and all information pertaining to wells drilled, production secured, marketing of Unit Production and to the books, records and vouchers relating to the operation of the Unit Area. Unit Operator shall, upon request, furnish to any such Lessee tank tables, daily gauge and run tickets and reports of stock on hand at the first of each month and any other pertinent information pertaining to the Unit Area or development and operation thereof. All of the rights herein granted shall apply with equal force to the construction and operation by the Unit of any repressuring or pressure maintenance plant or other facilities in connection therewith.

BLEED THROUGH

BLURRED COPY

XVII.

LIABILITY

No member of the Operating Committee or any other committee shall be personally liable or individually responsible for any act, error, default or omission as a member of such committee or committees.

Neither the Unit nor the Unit Operator shall be liable or responsible under any of the provisions of this Plan of Unitization for any acts or omissions resulting from causes beyond the control of the Unit or such Unit Operator, or other causes which by the exercise of due diligence could not have been prevented or overcome.

Unit Operator shall not be liable or responsible for any damage to the Unit Area or the property, equipment or facilities used in the development and operation thereof, or for the loss of any production arising out of its operation of the Unit Area, except only for bad faith or gross negligence in connection therewith.

If and in the event, nothwithstanding the foregoing provisions of this section, the Unit, the Unit Operator or any member of the Operating Committee is held liable by a court of competent jurisdiction for any matter or thing for which it is herein provided the Unit or person so named shall not be liable, the amount of such liability as finally determined shall thereupon be treated, regarded and paid as an item of Unit Expense.

[7460]

XVIII.

CHANGE OF INTEREST

All transfers, assignments and conveyances of any interest in, or with respect to, any of the Separately Owned Tracts within the Unit Area shall be subject to the terms, provisions and conditions of this Plan of Unitization, but shall not be binding on the Unit or the Unit Operator unless and until a photostatic or certified copy of the recorded instrument evidencing such change of ownership has been delivered to the Unit Operator. Each such transfer, assignment or conveyance, whether so stating or not, shall operate to impose upon the person or persons acquiring such interest the obligation of the assignor or grantor with respect to the interest so transferred and shall likewise operate to give and grant to the person or persons acquiring such interest all benefit attributable hereunder to such interest.

XIX.

AUDITS

The Operating Committee shall cause an audit to be made of the books, accounts and records of the Unit Operator in respect to matters pertaining to the Unit and the operation of the Unit Area at least once each year and shall furnish a copy thereof to each of the Lessees within the Unit Area. Each such audit shall cover the period intervening since the last audit. The audit may be made by an auditor or auditing committee from the accounting staff of one or more of the Lessees within the Unit Area, or by an independent auditor or auditors employed by the Unit to make such audit.

BLEED THROUGH

BLURRED COPY

XX.

RIGHTS OF WAY

The Unit shall have a servitude and right of way on, over and across all of the lands in the Unit Area for the purpose of laying, constructing, building, using and maintaining, operating, changing, repairing and removing pipelines, tanks, telegraph and telephone lines, water lines, and other facilities for the development and operation of the Unit Area for Oil and Gas and for the gathering, handling and disposal of the Unit Production; provided, the Unit shall pay all damages to growing crops, timber, fences, improvements and structures on the land resulting from the exercise of the rights and privileges granted to it in this section.

XXI.

CLAIMS, SUITS AND JUDGMENTS AGAINST INDIVIDUAL OWNERS OF UNIT AREA

In the event claim is made against any of the Lessees of the Unit Area or any of such Lessees are sued on account of any matter or

thing growing out of the development and operation of the Unit Area by the Unit and over which such Lessee or Lessees have no control because of the rights, powers and duties herein granted the Unit, said Lessee or Lessees shall immediately notify the Operating Committee in writing of such claim or suit. The Operating Committee shall assume and take over the further handling of such claim or suit

and in pursuance thereof may select an attorney or attorneys for that purpose, who, subject to the directions of the Operating Committee, shall have the exclusive right to direct and control the settlement or defense thereof. Should such claim be settled, final judgment be entered against any such defendant or defendants upon said cause of action and any such defendant is required to pay or satisfy such judgment or expense of litigation in whole or in part, the amount of such settlement or judgment shall be treated, regarded and paid as any other item of Unit Expense. Nothing herein contained shall apply to or relieve any such Lessee or Lessees of liability which may have accrued prior to the Effective Date of this Plan of Unitization.

XXII.

TITLE INFORMATION

Upon request of either the operating committee or the Unit Operator, the Lessees of the several Separately Owned Tracts shall furnish and make available to the Unit or the Unit Operator, as the case may be, an abstract brought to the date of the request, together with all other title information in the possession and files of such Lessees, title opinions, original or true copies of all leases, assignments, contracts, curative matter and all other data and information pertaining to or otherwise affecting titles to the Oil and Gas Rights in and to the Unit Area.

XXIII.

OTHER FORMATIONS

It is understood that the common source of supply described herein as the Unit Area, namely, the Hunton Lime

BLEED THROUGH

BLURRED COPY

Formation of the West Edmond Field, underlies and may overlie other reservoirs or common sources of supply of Oil and Gas not a part of the aforesaid Hunton Lime Formation or a part of the Unit Area of the Unit created hereby. Except as specifically provided in this Plan of Unitization, all rights of any and all persons in and to such other reservoirs or common sources of supply of Oil and Gas and the production therefrom, together with the right of ingress and egress and the use of the surface of the Unit Area for the exploration, development and operation of such other reservoirs or common sources of supply of Oil and Gas, are expressly reserved unto the separate owners thereof and shall remain unaffected by the creation of the Unit and the adoption of this Plan of Unitization, all to the same extent as if this Plan of Unitization had not been adopted except

[7462]

that in the exercise of such rights the owners thereof shall have due regard for the rights granted the Unit with respect to its operations hereunder. Likewise, any reference in this Plan of Unitization to a Separately Owned Tract or to the Unit Area, although in general terms broad enough to include the surface and all underlying common sources of supply of Oil and Gas, shall have reference to the lands embraced within such Separately Owned Tract and within the Unit Area only in relation to the Hunton Lime Formation of the West Edmond Field.

XXIV.

ABANDONMENT OF WELLS

If the Operating Committee at any time desires to abandon any well and salvage the casing and the other

equipment that is a part of the well, the Lessee or Lessees of the Separately Owned Tract on which such well is located shall be notified in writing of such decision and shall have and be granted thirty (30) days from receipt of such notice within which to elect to take over such well for the purpose of completing the same in some other formation not a part of the Unit Area. Any such Lessee electing to take over such a well shall pay to the Unit Operator the fair market value of the casing and other equipment comprised in the well, less the reasonable cost of salvaging the same, and shall agree to assume full responsibility for the proper plugging and abandonment thereof at such time as the well is ultimately abandoned. No such well shall be operated or used for the production of Oil and Gas from the Unit Area and to that end the Lessee taking over such a well shall immediately cause the Hunton Lime Formation in such well to be sealed off in a manner satisfactory to the Operating Committee. In the event the Lessee or Lessees of such a Separately Owned Tract do not elect to take over such well, the Unit Operator shall proceed to properly plug and abandon the same and salvage the casing and other equipment therefrom.

XXV.

ABANDONMENT OF OPERATIONS AND DISSOLUTION OF UNIT

At such time as it is determined by the Operating Committee that Unit Production can no longer be produced from the Unit Area in paying quantities the further development and operation of the Unit Area by the Unit shall be abandoned, the Unit dissolved and its affairs wound up.

Upon abandonment of Unit Operations,

BLEED THROUGH

BLURRED COPY

(a) All rights in and to the several Separately Owned Tracts shall revert to the separate owners and Lessees thereof;

(b) The owner or Lessee of a Separately Owned Tract desiring to take over and continue to operate a well located on such Separately Owned Tract may do so by paying the fair market value of the casing and

[7463]

other equipment comprised in the well, less the reasonable cost of salvaging the same and by agreeing to properly plug and abandon the well at such time as it is ultimately abandoned;

(c) With respect to all wells not taken over by the owner or Lessees of the Separately Owned Tracts as aforesaid, the Unit Operator shall salvage so much of the casing and other equipment therein as can economically and reasonably be salvaged and shall cause such well to be properly plugged and abandoned;

(d) The salvaging, liquidation or other distribution of assets and properties used in the operation of the Unit Area shall be in a manner determined by the Operating Committee; provided, any Lessee desiring to take its share of the physical assets or any portion thereof in kind may do so. All such assets and property shall belong to the several Lessees in proportion to their repective interests in the Unit.

At such time as the Unit Operations are abandoned and the affairs of the Unit wound up, the Unit shall submit for filing a declaration to that effect with the Secretary of the Corporation Commission and with the County Clerks of Oklahoma, Logan, Kingfisher and Canadian Counties, Oklahoma, whereupon the rights, powers and duties of the Unit

shall be at an end; provided, however, that if any liability or obligation incurred prior thereto should accrue and become payable thereafter, the amount thereof shall be borne and paid as Unit Expense in the same manner as if it had accrued prior to dissolution of the Unit.

XXVI.

AMENDMENT TO PLAN OF UNITIZATION AND ENLARGEMENT OF UNIT

Any amendment of this Plan of Unitization or any enlargement of the Unit or Unit Area shall be in accordance with the provisions of Sections 11 and 12 of House Bill 339 of the 1945 Legislature of the State of Oklahoma or any amendment thereo.

XXVII.

SUBSCRIBERS

Provision is made below for the signing of this Plan of Unitization by Lessees within the Unit Area who wish to expressly signify their agreement to the terms, provisions and conditions hereof. Such Lessees may sign either as Unqualified or Qualified Subscribers. Those signing as Unqualified Subscribers agree to all the terms, provisions and conditions hereof, including the agreement to participate in carrying the Lessees who elect to be carried under the provisions of Section XI. Those signing as Qualified Subscribers agree to all the terms, provisions and conditions hereof, except that they reserve the right

[7464]

to be carried in respect to the payment of Unit Expense as is provided in Section XI and do not agree to participate in

BLEED THROUGH BLURRED COPY

carrying the other Lessees who elect to be carried under the terms of said Section. This Plan of Unitization may be signed by the subscribers hereto at any time by signing the original or any counterpart hereof or may be ratified by the signing of a separate instrument in writing specifically referring hereto all with the same force and effect as if all parties had signed the same instrument. The original of this Plan of Unitization, together with all signed counterparts and all signed ratifications hereof, shall be filed with and at all times from and after the approval hereof by the Commission remain on file in the office of the Secretary of the Commission.

The signing hereof by Lessees within the Unit Area is subject to the following conditions and provisions:

(a) If an order of the Commission approving this Plan of Unitization is not entered on or before June 1, 1947, any such subscriber may revoke its execution hereof by filing written notice of such revocation with the Secretary of the Commission, if petition for aproval of this Plan of Unitization has theretofore been filed with the Commission, or by mailing such written notice to the company herein designated as Unit Operator, in the event such petition has not theretofore been filed, provided such notice is so filed or mailed prior to the entry of an order of the Commission approving this Plan of Unitization.

(b) Lessees executing this Plan of Unitization as Unqualified Subscribers shall not be bound hereby unless, on or before the entry of an order of the Commission approving this Plan of Unitization, this Plan of Unitization is executed by Unqualified Subscribers who, on the basis of their respective lease ownerships at the times of execution by them respectively, are charge-

able with at least fifty per cent (50%) of the Unit Expense as herein provided for.

Otherwise than as herein provided, the signing hereof by Lessees within the Unit Area shall be binding upon such Lessees, their heirs, personal representatives, successors and assigns.

UNQUALIFIED SUBSCRIBERS:

Sunray Oil Corporation

By J. K. Ellis
Vice President

.....

By.....

Attest:

W. D. Forster
Secretary

Attest:

.....

[7465]

UNQUALIFIED SUBSCRIBERS:

Sohio Petroleum Company
By Earl Wasson
Vice President

Attest:
Thos. A. Bowles Jr.
Asst. Secy.

BLEED THROUGH

BLURRED COPY

Mid-Continent Petroleum Corporation
By A. E. Pierce
Vice President

Attest:
A. L. Dhelldle
Asst. Secy.

Stanolind Oil and Gas. Co.
By E. F. Bullard
President

Attest:
D. A. Marker
Assistant Secretary

Phillips Petroleum Co.
By C. P. Dimit
Vice-President

Paul J. Parker
Asst. Secretary

Tide Water Associated Oil Co.
By E. H. Sarlin
Vice-President

Attest:
Y. P. Broome
Ass't. Secretary

Continental Oil Company
By W. C. MacMillan

Attest:
A. C. Frazer
Assistant Secretary

Deep Rock Oil Corporation
By Richard K. Huey
Vice Pres.

Attest:
O. O. Kerr
Secretary

Herbert J. Schmitz
J. Marshall Nye

Attest:

.....

Magnolia Petroleum Company
By R. M. Chan
Vice-President

Attest:
M. W. Patterson
Secretary

Cargill & Westcott
By Harold F. Westcott

Attest:

.....

Cities Service Oil Company
By Sam Harlan

Attest:
M. A. Wilson
Asst. Secretary

BLEED THROUGH BLURRED COPY

[7466]

UNQUALIFIED SUBSCRIBERS:

Sinclair Prairie Oil Company
By J. W. Jordan
Vice President

Attest:
A. E. Barrus
Secretary

Barnsdall Oil Company
By D. R. Snow
Vice-President

Attest:
S. Altman
Asst. Secy.

Skelly Oil Company
By Hugh M. Stallcup
Vice-President

Attest:
C. O. Winn
Asst. Secy.

Amerada Petroleum Corporation
By Earle S. Porter
Vice President

Attest:
L. E. Etchison

Champlin Refining Company
By Joe N. Champlin
Pres.

Attest:
Granvle Wilkinson
Secy.-Treas.

Anderson-Prichard Oil Corporation
By L. H. Prichard Jr.
Vice President

Attest:
Neale Boyd

Oil Carriers, Inc.
By William H. Atkinson, Agent

Attest:
.....

Leonard A. Chudocoff
By Joud Miller
Ofc. Mgr.

Attest:
.....

Hyman Friedlosh
By Joud Miller
Agent

Attest:
.....

The Carter Oil Company
By D. O. May

Attest:
Joseph A. Gill
Asst. Secretary

BLEED THROUGH BLURRED COPY

The Atlantic Refining Company
By E. H. Blum
Vice-President

Attest:
L. A. Sunkel
Assistant Secretary

[7467]

UNQUALIFIED SUBSCRIBERS:

C. L. McMahon, Inc. C. E. Tabor
By Chas. L. McMahon Jr.

Attest:
Chas. L. McMahon, Jr.

James M. Johnson
By.....

Attest:
Earle Johnson

Kerr-McGee Oil Industries Inc.
D. A. McGee
Vice-President

Attest:
T. W. Fentem
Secretary

Gulf Petroleum Co.
By R. H. Rucker
Pres.

Attest:
D. N. Hobbs

Bluff Creek Oil Co.
By Louis R. Burnett

Attest:
S. S. Burnett
Secy.-Treas.

Deer Creek Oil Co.
By J. L. Jones

Attest:
Robert Rucker, Jr.
Sec'y.

Midstates Oil Corp.
By N. T. Gilbert

Attest:
.....

Champlin Refining Company
By N. Leavitt
Vice President

Attest:
Granvle Wilkinson
Secy.-Treas.

.....
By.....

Attest:
.....

.....
By.....

Attest:
.....

BLEED THROUGH BLURRED COPY

[7468]

UNQUALIFIED SUBSCRIBERS:

Allied Oil Company Inc.
By Chas. W. Scott
Atty. in Fact.

Attest:

.....

Warren Wright
By Chas. W. Scott
Agent

Attest:

.....

.....
By.....

Attest:

.....

.....
By.....

Attest:

.....

Frank Russell
By.....

Attest:

.....

W. E. Stegmeir
By.....

7468

Witness:
K. Cotter

F. G. Fox—W. J. Fox
By W. E. Stegmeir

Attest:
.....

.....
By.....

Attest:
.....

.....
By A. Gentonsky

Attest:
.....

Peppers Refining Co.
By Chas. C. Peppers

Attest:
Joe N. Champlin

* * *

BLEED THROUGH BLURRED COPY

[7470]

EXHIBIT "B"
TABLE OF PERCENTAGE PARTICIPATION IN THE UNIT

Tract	Operator	Lease	Description	Percentage Interest in Unit
1	Anderson-Prichard	Wright	NE SW 13-15N-5W	.03764030
2	Anderson-Prichard	Wright	SW SW 13-15N-5W	.08554025
3	Anderson-Prichard	Wright	SE SW 13-15N-5W	.07871646
4	Phillips	Nakvinda	SW SE 13-15N-5W	.07759948
5	Anderson-Prichard	Stewart	NW NW 24-15N-5W	.09322790
6	Anderson-Prichard	Stewart	NE NW 24-15N-5W	.10226271
7	Phillips	Storm	NW NE 24-15N-5W	.08140602
8	Anderson-Prichard	Stewart	SE NW 24-15N-5W	.10210472
9	Phillips	Storm	SW NE 24-15N-5W	.11306472
10	Phillips	Chester	NE SW 24-15N-5W	.11569014
11	Phillips	Libecayt	NW SE 24-15N-5W	.10949440
12	Phillips	Libecayt	NE SE 24-15N-5W	.09420642
13	Phillips	Bierman	NW SW 19-15N-4W	.10526350
14	Phillips	Chester	SE SW 24-15N-5W	.09868168
15	Phillips	Libecayt	SW SE 24-15N-5W	.09088301
16	Phillips	Libecayt	SE SE 24-15N-5W	.11401613
17	Phillips	Bierman	SW SW 19-15N-4W	.09998460
18	Phillips	Bierman	SE SW 19-15N-4W	.06138712
19	Anderson-Prichard	Collett	NE NW 25-15N-5W	.11436507
20	Atlantic	Trindle	NW NE 25-15N-5W	.08274248
21	Atlantic	Trindle	NE NE 25-15N-5W	.07567286
22	Sohio	Messenbaugh	NW NW 30-15N-4W	.10961688
23	Sohio	Messenbaugh	NE NW 30-15N-4W	.06890478
24	Stanolind	Christner	NW NE 30-15N-4W	.04417463
25	Anderson-Prichard	Collett	SW NW 25-15N-5W	.08498474
26	Anderson-Prichard	Collett	SE NW 25-15N-5W	.11499017
27	Atlantic	Trindle	SW NE 25-15N-5W	.11546930
28	Atlantic	Trindle	SE NE 25-15N-5W	.09374234
29	Sohio	Messenbaugh	SW NW 30-15N-4W	.07423889
30	Sohio	Messenbaugh	SE NW 30-15N-4W	.05202739
31	Stanolind	Christner	SW NE 30-15N-4W	.03271795
32	Stanolind	Christner	SE NE 30-15N-4W	.03346428
33	Barnsdall	Anderson	SW NW 29-15N-4W	.02972247
34	Phillips	Barr	NW SW 25-15N-5W	.10620613

35	Phillips	Barr	NE SW 25-15N-5W	.11335920
36	Atlantic	Trindle	NW SE 25-15N-5W	.11131247
37	Atlantic	Trindle	NE SE 25-15N-5W	.08067213
38	Cities Service	Messenbaugh	NW SW 30-15N-4W	.06809326
39	Cities Service	Messenbaugh	NE SW 30-15N-4W	.05968209
40	Phillips	Lenhart	NW SE 30-15N-4W	.03905848
41	Phillips	Lenhart	NE SE 30-15N-4W	.07144672
42	Phillips	Derr	NW SW 29-15N-4W	.02550924
43	Phillips	Barr	SE SW 25-15N-5W	.12100811

[7471]

Tract	Operator	Lease	Description	Percentage Interest in Unit
44	Atlantic	Trindle	SW SE 25-15N-5W	.11470636
45	Atlantic	Trindle	SE SE 25-15N-5W	.08237774
46	Cities Service	Messenbaugh	SW SW 30-15N-4W	.06265213
47	Cities Service	Messenbaugh	SE SW 30-15N-4W	.08926769
48	Phillips	Lenhart	SW SE 30-15N-4W	.07627050
49	Phillips	Lenhart	SE SE 30-15N-4W	.03590171
50	Phillips	Derr	SW SW 29-15N-4W	.06578083
51	Phillips	Derr	SE SW 29-15N-4W	.05020576
52	Phillips	Delbridge	NE NW 36-15N-5W	.11664066
53	Phillips	Tapp	NW NE 36-15N-5W	.08280806
54	Phillips	Cushman	NE NE 36-15N-5W	.08506391
55	Phillips	Beutler "A"	NW NW 31-15N-4W	.06468459
56	Phillips	Beutler "A"	NE NW 31-15N-4W	.08254576
57	Phillips	Burge	NW NE 31-15N-4W	.08292052
58	Phillips	Burge	NE NE 31-15N-4W	.06837084
59	Phillips	Cavan	NW NW 32-15N-4W	.06688371
60	Phillips	Cavan	NE NW 32-15N-4W	.05133021
61	Phillips	Dial	NW NE 32-15N-4W	.06546282
62	Phillips	Delbridge	SE NW 36-15N-5W	.12551779
63	Phillips	Tapp	SW NE 36-15N-5W	.08766735
64	Phillips	Tapp	SE NE 36-15N-5W	.07270130
65	Phillips	Beutler "A"	SW NW 31-15N-4W	.07412813
66	Phillips	Beutler "A"	SE NW 31-15N-4W	.10749234
67	Phillips	Burge	SW NE 31-15N-4W	.08021923
68	Phillips	Burge	SE NE 31-15N-4W	.05522151
69	Phillips	Cavan	SW NW 32-15N-4W	.05991176
70	Phillips	Cavan	SE NW 32-15N-4W	.05156431
71	Phillips	Dial	SW NE 32-15N-4W	.02208056
72	Phillips	Dial	SE NE 32-15N-4W	.02566638
73	Stanolind	State	NW SW 36-15N-5W	.10579624

BLEED THROUGH

BLURRED COPY

74	Tide Water	State	NE SW 36-15N-5W	.13400799
75	Phillips	Tapp	NW SE 36-15N-5W	.08613145
76	Phillips	Tapp	NE SE 36-15N-5W	.07624689
77	Phillips	Beutler "B"	NW SW 31-15N-4W	.11414422
78	Phillips	Beutler "B"	NE SW 31-15N-4W	.10754578
79	Cities Service	Ziebell	NW SE 31-15N-4W	.07956366
80	Allied	Faris	NE SE 31-15N-4W	.08935240
81	Phillips	Knuth	NW SW 32-15N-4W	.05027829
82	Phillips	Hat	NE SW 32-15N-4W	.04455007
83	Continental	Boone	NW SE 32-15N-4W	.06066380
84	Continental	Boone	NE SE 32-15N-4W	.09378222
85	Continental	Sellers	NW SW 33-15N-4W	.02033125
86	Stanolind	State	SW SW 36-15N-5W	.12540736
87	Tide Water	State	SE SW 26-15N-5W	.12223602
88	Magnolia	School Land	SW SE 36-15N-5W	.12562821
89	Magnolia	School Land	SE SE 36-15N-5W	.11925460
90	Phillips	Beutler "B"	SW SW 31-15N-4W	.11427231
91	Phillips	Beutler "B"	SE SW 31-15N-4W	.10506865

[7472]

Tract	Operator	Lease	Description	Percentage Interest in Unit
92	Cities Service	Ziebell	SW SE 31-15N-4W	.08908032
93	Allied	Faris	SE SE 31-15N-4W	.10438283
94	Phillips	Knuth	SW SW 32-15N-4W	.06677515
95	Phillips	Hat	SE SW 32-15N-4W	.05150631
96	Continental	Boone	SW SE 32-15N-4W	.05924923
97	Continental	Boone	SE SE 32-15N-4W	.08776485
98	Continental	Sellers	SW SW 33-15N-4W	.03664620
99	Continental	Sellers	SE SW 33-15N-4W	.04051622
100	Continental	Murphy "A"	SW SE 33-15N-4W	.10144955
101	Continental	M. Lenhart	SE SE 33-15N-4W	.12227135
102	Carter	McKinnis	SW SW 34-15N-4W	.12453944
103	Fox	Roush	NW NW 1-14N-5W	.11433194
104	Fox	Roush	NE NW 1-14N-5W	.13701282
105	Stanolind	Reherman "B"	NW NE 1-14N-5W	.12907341
106	Stanolind	Reherman "B"	NE NE 1-14N-5W	.12562821
107	Stanolind	Derr	NW NW 6-14N-4W	.12063709
108	Stanolind	Derr	NE NW 6-14N-4W	.11212304
109	Phillips	Clell	NW NE 6-14N-4W	.10188523
110	Phillips	Clell	NE NE 6-14N-4W	.10606058
111	Sohio	Murphy	NW NW 5-14N-4W	.09702527
112	Sohio	Murphy	NE NW 5-14N-4W	.07122740

113	Continental	H. Lenhart	NW NE	5-14N-4W	.06257795
114	Continental	H. Lenhart	NE NE	5-14N-4W	.06912309
115	Continental	McAuliff	NW NW	4-14N-4W	.05764656
116	Continental	McAuliff	NE NW	4-14N-4W	.10532540
117	Continental	Murphy	NW NE	4-14N-4W	.11122905
118	Continental	Murphy	NE NE	4-14N-4W	.11922368
119	Carter	Blehm	NW NW	3-14N-4W	.13330923
120	Carter	Blehm	NE NW	3-14N-4W	.12046041
121	Carter	Whisler	NW NE	3-14N-4W	.15664382
122	Phillips	Abbott	SW NW	1-14N-5W	.10266023
123	Phillips	Abbott	SE NW	1-14N-5W	.12849921
124	Stanolind	Reherman "B"	SW NE	1-14N-5W	.13280570
125	Stanolind	Reherman "B"	SE NE	1-14N-5W	.13277699
126	Stanolind	Derr	SW NW	6-14N-4W	.11919956
127	Stanolind	Derr	SE NW	6-14N-4W	.11449877
128	Phillips	Clell	SW NE	6-14N-4W	.11012482
129	Phillips	Clell	SE NE	6-14N-4W	.11219194
130	Sohio	Murphy	SW NW	5-14N-4W	.08838336
131	Sohio	Murphy	SE NW	5-14N-4W	.08539399
132	Continental	H. Lenhart	SW NE	5-14N-4W	.08469833
133	Continental	H. Lenhart	SE NE	5-14N-4W	.07317782
134	Continental	McAuliff	SW NW	4-14N-4W	.10703298
135	Continental	McAuliff	SE NW	4-14N-4W	.11919956
136	Phillips	Kosar	SW NE	4-14N-4W	.14866510
137	Phillips	Kosar	SE NE	4-14-4W	.18350311
138	Carter	Blehm	SW NW	3-14N-4W	.15615221

[7473]

Tract	Operator	Lease	Description		Percentage Interest in Unit
139	Carter	Blehm	SE NW	3-14N-4W	.16212963
140	Carter	Whisler	SW NE	3-14N-4W	.16692641
141	Tide Water	Balyeat	NE SW	1-14N-5W	.12568342
142	Stanolind	Abercrombie	NW SE	1-14N-5W	.11909220
143	Stanolind	Abercrombie	NE SE	1-14N-5W	.13055246
144	Stanolind	J. Kelly "B"	NW SW	6-14N-4W	.11896478
145	Stanolind	J. Kelly "B"	NE SW	6-14N-4W	.09936352
146	Phillips	Edmond	NW SE	6-14N-4W	.08461900
147	Phillips	Edmond	NE SE	6-14N-4W	.09843732
148	Cities Service	J. O'Brien "B"	NW SW	5-14N-4W	.05628836
149	Cities Service	J. O'Brien "B"	NE SW	5-14N-4W	.10040676
150	Continental	Mason	NW SE	5-14N-4W	.09199426
151	Continental	Mason	NE SE	5-14N-4W	.09290037

BLEED THROUGH

BLURRED COPY

152	Sohio	Whisler	NW SW	4-14N-4W	.12227135
153	Sohio	Whisler	NE SW	4-14N-4W	.13663076
154	Continental	Seyller	NW SE	4-14N-4W	.20932883
155	Continental	Seyller	NE SE	4-14N-4W	.19395795
156	Cities Service	Seyller	NW SW	3-14N-4W	.21860039
157	Cities Service	Seyller	NE SW	3-14N-4W	.18759106
158	Carter	Hoover	NW SE	3-14N-4W	.14890538
159	Carter	Hoover	NE SE	3-14N-4W	.14528350
160	Anderson-Prichard	Balyeat	SE SW	1-14N-5W	.12503193
161	Stanolind	Reherman "A"	SW SE	1-14N-5W	.12993471
162	Stanolind	Reherman "A"	SE SE	1-14N-5W	.11192966
163	Stanolind	J. Kelly "B"	SW SW	6-14N-4W	.11098833
164	Stanolind	J. Kelly "A"	SE SW	6-14N-4W	.11766061
165	Phillips	Edmond	SW SE	6-14N-4W	.09970837
166	Phillips	Edmond	SE SE	6-14N-4W	.11579853
167	Cities Service	J. O'Brien "B"	SW SW	5-14N-4W	.11435932
168	Peppers	J. O'Brien	SE SW	5-14N-4W	.08475286
169	Continental	Mason	SW SE	5-14N-4W	.07977108
170	Continental	Mason	SE SE	5-14N-4W	.12010706
171	Sohio	Whisler	SW SW	4-14N-4W	.14532767
172	Sohio	Whisler	SE SW	4-14N-4W	.17750617
173	Continental	Seyller	SW SE	4-14N-4W	.20199675
174	Continental	Seyller	SE SE	4-14N-4W	.19082945
175	Cities Service	Seyller	SW SW	3-14N-4W	.24013243
176	Cities Service	Seyller	SE SW	3-14N-4W	.18885641
177	Carter	Hoover	SW SE	3-14N-4W	.15804310
178	Sohio	Swope	NW NE	12-14N-5W	.09774727
179	Sohio	Swope	NE NE	12-14N-5W	.13174653
180	Fox	Williams	NW NW	7-14N-4W	.13371117
181	Fox	Williams	NE NW	7-14N-4W	.12706371
182	Anderson-Prichard	Mosier	NW NE	7-14N-4W	.12173249
183	Anderson-Prichard	Mosier	NE NE	7-14N-4W	.11696663
184	Cities Service	O'Brien "A"	NW NW	8-14N-4W	.11433415
185	Peppers	M. O'Brien	NE NW	8-14N-4W	.11710356
186	Peppers	M. O'Brien	NW NE	8-14N-4W	.13794258

[7474]

Tract	Operator	Lease	Description		Percentage Interest in Unit
187	Sohio	Lachenmaier	NE NE	8-14N-4W	.14139661
188	Peppers	C. O'Brien	NW NW	9-14N-4W	.17475319
189	Sinclair	O'Brien	NE NW	9-14N-4W	.21761056
190	Continental	Johnson	NW NE	9-14N-4W	.20440397
191	Continental	Johnson	NE NE	9-14N-4W	.27022932

192	Phillips	Jorgenson	NW	NW	10-14N-4W .26175767
193	Phillips	Vida	NE	NW	10-14N-4W .21827310
194	Cities Service	Odle	NW	NE	10-14N-4W .20659034
195	Allied	Kelly	SE	NW	12-14N-5W .10622384
196	Sohio	Swope	SW	NE	12-14N-5W .13238610
197	Sohio	Swope	SE	NE	12-14N-5W .13075184
198	Fox	Williams	SW	NW	7-14N-4W .12886316
199	Fox	Williams	SE	NW	7-14N-4W .12720947
200	Anderson-Prichard	Mosier	SW	NE	7-14N-4W .09616992
201	Anderson-Prichard	Mosier	SE	NE	7-14N-4W .12063709
202	Cities Service	O'Brien "A"	SW	NW	8-14N-4W .11512036
203	Peppers	M. O'Brien	SE	NW	8-14N-4W .13439580
204	Sohio	Lachenmaier	SW	NE	8-14N-4W .14055740
205	Sohio	Lachenmaier	SE	NE	8-14N-4W .14761210
206	Sinclair	Lynn	SW	NW	9-14N-4W .17116665
207	Sinclair	C. O'Brien	SE	NW	9-14N-4W .25454926
208	Phillips	Coder "B"	SW	NE	9-14N-4W .24537090
209	Phillips	Coder "A"	SE	NE	9-14N-4W .20575201
210	Phillips	Jorgenson	SW	NW	10-14N-4W .24358999
211	Phillips	Vida	SE	NW	10-14N-4W .18117097
212	Cities Service	Odle	SW	NE	10-14N-4W .22898413
213	Phillips	Struble	SE	NE	10-14N-4W .11154558
214	Allied	Mulvey	NE	SW	12-14N-5W .09686864
215	Fox	O'Brien	NW	SE	12-14N-5W .13167939
216	Fox	O'Brien	NE	SE	12-14N-5W .13406453
217	Sohio	Williams "B"	NW	SE	7-14N-4W .12958577
218	Sohio	Williams "B"	NE	SW	7-14N-4W .12558846
219	Gulf	Christner	NW	SE	7-14N-4W .12425896
220	Gulf	Christner	NE	SE	7-14N-4W .12235527
221	Peppers	Long	NW	SW	8-14N-4W .11112298
222	Peppers	Long	NE	SW	8-14N-4W .11914873
223	Phillips	Rodkey	NW	SE	8-14N-4W .09892846
224	Phillips	Rodkey	NE	SE	8-14N-4W .15153344
225	Sohio	Casey	NW	SW	9-14N-4W .16215613
226	Sohio	Casey	NE	SW	9-14N-4W .20482358
227	Sohio	Harris	NW	SE	9-14N-4W .25309609
228	Sohio	Harris	NE	SE	9-14N-4W .30027674
229	Phillips	McKinnis	NW	SW	10-14N-4W .24982315
230	Phillips	McKinnis	NE	SW	10-14N-4W .19576006
231	Phillips	Whis	NW	SE	10-14N-4W .22524741
232	Phillips	Whis	NE	SE	10-14N-4W .18764465
233	Allied	O'Brien	SW	SE	12-14N-5W .12934946
234	Allied	O'Brien	SE	SE	12-14N-5W .13013347

BLEED THROUGH

BLURRED COPY

[7475]

Tract	Operator	Lease	Description	Percentage Interest in Unit
235	Sohio	Williams "B"	SW SW 7-14N-4W	.12920150
236	Sohio	Williams "B"	SE SW 7-14N-4W	.12354342
237	Gulf	Christner	SW SE 7-14N-4W	.12195687
238	Gulf	Christner	SE SE 7-14N-4W	.12213884
239	Peppers	Long	SW SW 8-14N-4W	.13195324
240	Peppers	Long	SE SW 8-14N-4W	.11566467
241	Peppers	Fentem	SW SE 8-14N-4W	.12832916
242	Peppers	Fentem	SE SE 8-14N-4W	.13644695
243	Sohio	Casey	SW SW 9-14N-4W	.15844592
244	Sohio	Casey	SE SW 9-14N-4W	.15079582
245	Sohio	Harris	SW SE 9-14N-4W	.23156802
246	Sohio	Harris	SE SE 9-14N-4W	.30340922
247	Anderson-Prichard	McKinnis	SW SW 10-14N-4W	.23709801
248	Anderson-Prichard	McKinnis	SE SW 10-14N-4W	.21404964
249	Deep Rock	Whisler	SW SE 10-14N-4W	.22850533
250	Deep Rock	Whisler	SE SE 10-14N-4W	.17982381
251	Stanolind	Drake	NW NE 13-14N-5W	.12629075
252	Stanolind	Drake	NE NE 13-14N-5W	.10778981
253	Mid-Continent	E. Lynch	NW NW 18-14N-4W	.13015555
254	Mid-Continent	E. Lynch	NE NW 18-14N-4W	.12167117
255	Sohio	E. Lynch	NW NE 18-14N-4W	.07961820
256	Sohio	E. Lynch	NE NE 18-14N-4W	.11901982
257	Gulf	Wright	NW NW 17-14N-4W	.12275721
258	Gulf	Wright	NE NW 17-14N-4W	.12760478
259	Peppers	McCune	NW NE 17-14N-4W	.10197086
260	Peppers	McCune	NE NE 17-14N-4W	.12741265
261	Phillips	Gomer	NW NW 16-14N-4W	.14875962
262	Phillips	Gomer	NE NW 16-14N-4W	.16069325
263	Anderson-Prichard	State "A"	NW NE 16-14N-4W	.19978829
264	Anderson-Prichard	State "B"	NE NE 16-14N-4W	.25780452
265	Phillips	Gilmore	NW NW 15-14N-4W	.22077572
266	Phillips	Gilmore	NE NW 15-14N-4W	.19872823
267	Cities Service	Gilmore	NW NE 15-14N-4W	.24351579
268	Cities Service	Gilmore	NE NE 15-14N-4W	.18269181
269	Magnolia	Kibby	NW NW 14-14N-4W	.08838256
270	Stanolind	Drake	SE NE 13-14N-5W	.12754515
271	Mid-Continent	E. Lynch	SW NW 18-14N-4W	.12831370
272	Mid-Continent	E. Lynch	SE NW 18-14N-4W	.13138787
273	Sohio	E. Lynch	SW NE 18-14N-4W	.10701685
274	Sohio	E. Lynch	SE NE 18-14N-4W	.07297919

275	Gulf	Wright	SW NW 17-14N-4W	.12524217
276	Gulf	Wright	SE NW 17-14N-4W	.12535136
277	Peppers	McCune	SW NE 17-14N-4W	.13512459
278	Peppers	McCune	SE NE 17-14N-4W	.13359324
279	Phillips	Gomer	SW NW 16-14N-4W	.14627731
280	Phillips	Gomer	SE NW 16-14N-4W	.15507140
281	Anderson-Prichard	State "A"	SW NE 16-14N-4W	.19666111
282	Anderson-Prichard	State "B"	SE NE 16-14N-4W	.22265203

[7476]

Tract	Operator	Lease	Description	Percentage Interest in Unit
283	Phillips	Ralph	SW NW 15-14N-4W	.23651939
284	Phillips	Ralph	SE NW 15-14N-4W	.23773846
285	Cities Service	Gilmore	SW NE 15-14N-4W	.25596620
286	Cities Service	Gilmore	SE NE 15-14N-4W	.18450575
287	Peppers	McKinnis "A"	NE SE 13-14N-5W	.13015555
288	Peppers	McKinnis	NW SW 18-14N-4W	.12677661
289	Peppers	McKinnis	NE SW 18-14N-4W	.12831370
290	Anderson-Prichard	Cypher	NW SE 18-14N-4W	.12370243
291	Anderson-Prichard	Cypher	NE SE 18-14N-4W	.12270918
292	Sohio	K. Lynch	NW SW 17-14N-4W	.11829970
293	Sohio	K. Lynch	NE SW 17-14N-4W	.14246992
294	Peppers	McCune	NW SE 17-14N-4W	.11056177
295	Peppers	McCune	NE SE 17-14N-4W	.13642316
296	Sohio	State	NW SW 16-14N-4W	.15354314
297	Phillips	Bluff "D"	NE SW 16-14N-4W	.16735043
298	Phillips	Bluff "D"	NW SE 16-14N-4W	.18299516
299	Phillips	Bluff "D"	NE SE 16-14N-4W	.20018581
300	Phillips	Whisler	NW SW 15-14N-4W	.25602451
301	Phillips	Whisler	NE SW 15-14N-4W	.22067148
302	Stanolind	Fleming	NW SE 15-14N-4W	.20858679
303	Sinclair	Boling	NE SE 15-14N-4W	.20907839
304	Peppers	McKinnis "A"	SE SE 13-14N-5W	.12301952
305	Peppers	McKinnis	SW SW 18-14N-4W	.11566841
306	Peppers	McKinnis	SE SW 18-14N-4W	.12754515
307	Anderson-Prichard	Cypher	SW SE 18-14N-4W	.12600807
308	Anderson-Prichard	Cypher	SE SE 18-14N-4W	.12629075
309	Anderson-Prichard	Cypher	SW SW 17-14N-4W	.12727086
310	Anderson-Prichard	Cypher	SE SW 17-14N-4W	.12629075
311	Peppers	McCune	SW SE 17-14N-4W	.11776015
312	Peppers	McCune	SE SE 17-14N-4W	.13421028
313	Sohio	State	SW SW 16-14N-4W	.15985934

BLEED THROUGH

BLURRED COPY

314	Phillips	Bluff "D"	SE SW 16-14N-4W	.21134295
315	Phillips	Bluff "D"	SW SE 16-14N-4W	.19578214
316	Phillips	Bluff "E"	SE SE 16-14N-4W	.23710242
317	Phillips	Whisler	SW SW 15-14N-4W	.20323702
318	Phillips	Whisler	SE SW 15-14N-4W	.23715543
319	Stanolind	Fleming	SW SE 15-14N-4W	.17520371
320	Sinclair	Boling	SE SE 15-14N-4W	.21540651
321	Stanolind	Sellers	SW SW 14-14N-4W	.14786917
322	Sohio	Silberberger	NE NE 24-14N-5W	.10170109
323	Peppers	Waller	NW NW 19-14N-4W	.13215642
324	Peppers	Waller	NE NW 19-14N-4W	.12266887
325	Peppers	Winter	NW NE 19-14N-4W	.12878189
326	Peppers	Winter	NE NE 19-14N-4W	.10538123
327	Sohio	Williams "A"	NW NW 20-14N-4W	.11977511
328	Sohio	Williams "A"	NE NW 20-14N-4W	.11805864
329	Gulf	Messenbaugh	NW NE 20-14N-4W	.12987729

[7477]

Tract	Operator	Lease	Description	Percentage Interest in Unit
330	Gulf	Messenbaugh	NE NE 20-14N-4W	.13892314
331	Sohio	King "B"	NW NW 21-14N-4W	.16826473
332	Sohio	King "B"	NE NW 21-14N-4W	.20275646
333	Sohio	King "A"	NW NE 21-14N-4W	.18473101
334	Sohio	King "A"	NE NE 21-14N-4W	.21405494
335	Phillips	Shinn	NW NW 22-14N-4W	.18821596
336	Phillips	Shinn	NE NW 22-14N-4W	.22015603
337	Anderson-Prichard	Davis	NW NE 22-14N-4W	.18945270
338	Anderson-Prichard	Davis	NE NE 22-14N-4W	.13346824
339	Fox	Surbeck	NW NW 23-14N-4W	.11286331
340	Sohio	Waller	SE NE 24-14N-5W	.11479130
341	Peppers	Waller	SW NW 19-14N-4W	.12985079
342	Peppers	Waller	SE NW 19-14N-4W	.12419713
343	Peppers	Winter	SW NE 19-14N-4W	.11771126
344	Peppers	Winter	SE NE 19-14N-4W	.11052762
345	Sohio	Williams "A"	SW NW 20-14N-4W	.11421898
346	Sohio	Williams "A"	SE NW 20-14N-4W	.12476488
347	Gulf	Messenbaugh	SW NE 20-14N-4W	.12964407
348	Gulf	Messenbaugh	SE NE 20-14N-4W	.14119068
349	Sohio	King "B"	SW NW 21-14N-4W	.17134333
350	Sohio	King "B"	SE NW 21-14N-4W	.20528779
351	Sohio	King "A"	SW NE 21-14N-4W	.19621942
352	Sohio	King "A"	SE NE 21-14N-4W	.20148438

353	Phillips	Shinn	SW NW 22-14N-4W	.19981479
354	Phillips	Shinn	SE NW 22-14N-4W	.19261079
355	Anderson-Prichard	Davis	SW NE 22-14N-4W	.16461812
356	Sohio	Waller	NE SE 24-14N-5W	.14020404
357	Chudacoff	McCain	NW SW 19-14N-4W	.12447098
358	Fox	Peterson	NE SW 19-14N-4W	.13247444
359	Mid-Continent	Peterson	NW SE 19-14N-4W	.11679098
360	Mid-Continent	Peterson	NE SE 19-14N-4W	.12317292
361	Stanolind	Briscoe	NW SW 20-14N-4W	.08683544
362	Sohio	Ward	NE SW 20-14N-4W	.13247444
363	Sohio	Ward	NW SE 20-14N-4W	.12831370
364	Stanolind	King	NE SE 20-14N-4W	.13523059
365	Wegener	King	NW SW 21-14N-4W	.15557316
366	Wegener	King	NE SW 21-14N-4W	.16997408
367	Continental	Casey	NW SE 21-14N-4W	.17222671
368	Continental	Casey	NE SE 21-14N-4W	.17514188
369	Peppers	Van Bibber	NW SW 22-14N-4W	.17871296
370	Peppers	Van Bibber	NE SW 22-14N-4W	.17888742
371	Peppers	Lowry	NW SE 22-14N-4W	.15149369
372	Sohio	Funk	SE SE 24-14N-5W	.13479332
373	Sohio	McCain	SW SW 19-14N-4W	.13711220
374	Fox	Peterson	SE SW 19-14N-4W	.14152205
375	Mid-Continent	Peterson	SW SE 19-14N-4W	.13201508
376	Mid-Continent	Peterson	SE SE 19-14N-4W	.13063523
377	Stanolind	Briscoe	SW SW 20-14N-4W	.09390333

[7478]

Tract	Operator	Lease	Description	Percentage Interest in Unit
378	Sohio	Ward	SE SW 20-14N-4W	.13173239
379	Sohio	Ward	SW SE 20-14N-4W	.12900804
380	Stanolind	King	SE SE 20-14N-4W	.13404686
381	Wegener	King	SW SW 21-14N-4W	.14605646
382	Wegener	King	SE SW 21-14N-4W	.14879937
383	Continental	Casey	SW SE 21-14N-4W	.14920352
384	Continental	Casey	SE SE 21-14N-4W	.16107399
385	Peppers	Lyons	SW SW 22-14N-4W	.15394066
386	Peppers	Lyons	SE SW 22-14N-4W	.14758030
387	Peppers	Lowry	SW SE 22-14N-4W	.06416322
388	Stanolind	K. Young	NE NE 25-14N 5W	.08938383
389	Sohio	M. Leonard	NW NW 30-14N-4W	.14097701
390	Sohio	M.Leonard"B"	NE NW 30-14N-4W	.14405560
391	Fox	Briscoe	NW NE 30-14N-4W	.13718729

BLEED THROUGH

BLURRED COPY

392	Sohio	Briscoe "B"	NE NE 30-14N-4W	.13173239
393	Sohio	Beam	NW NW 29-14N-4W	.12873330
394	Sohio	Beam	NE NW 29-14N-4W	.12849921
395	Sohio	Cook	NW NE 29-14N-4W	.12715646
396	Sohio	Baker	NE NE 29-14N-4W	.14110068
397	Stanolind	Crookham	NW NW 28-14N-4W	.15047338
398	Stanolind	Crookham	NE NW 28-14N-4W	.14480647
399	Sohio	McDowell	NW NE 28-14N-4W	.13644966
400	Anderson	Patten	NE NE 28-14N-4W	.13210341
401	Stanolind	Pauly	NW NW 27-14N-4W	.12736229
402	Russell	Pauly	NE NW 27-14N-4W	.12781017
403	Stanolind	Kirchner	NW NE 27-14N-4W	.04023100
404	Stanolind	K. Young	SE NE 25-14N-5W	.10506729
405	Sohio	M. Leonard	SW NW 30-14N-4W	.13907331
406	Sohio	M.Leonard"B"	SE NW 30-14N-4W	.14829584
407	Sohio	Briscoe 509	SW NE 30-14N-4W	.13841077
408	Sohio	Briscoe	SE NE 30-14N-4W	.13081809
409	Sohio	Beam	SW NW 29-14N 4W	.12598156
410	Sohio	Beam	SE NW 29-14N-4W	.06959144
411	Wescott	Cook	SW NE 29-14N-4W	.02906333
412	Sohio	Baker	SE NE 29-14N-4W	.09888376
413	Stanolind	Crookham	SW NW 28-14N-4W	.15305419
414	Stanolind	Crookham	SE NW 28-14N-4W	.14409977
415	Sohio	McDowell "D"	SW NE 28-14N-4W	.15289650
416	Anderson	Patten	SE NE 28-14N-4W	.12863172
417	Stanolind	Pauly	SW NW 27-14N-4W	.11131297
418	Russell	Pauly	SE NW 27-14N-4W	.10484660
419	Stanolind	Kirchner	SW NE 27-14N-4W	.06748406
420	Stanolind	Hansicker	NE SE 25-14N-5W	.13943108
421	Skelly	Spivey	NW SW 30-14N-4W	.14559269
422	Skelly	Spivey	NE SW 30-14N-4W	.14590187
423	Sohio	Cargill	NW SE 30-14N-4W	.13361842
424	Sohio	Cargill	NE SE 30-14N-4W	.13716167

[7479]

Tract	Operator	Lease	Description	Percentage Interest in Unit
425	Fox	Arnold	NW SW 29-14N-4W	.01126314
426	Fox	Arnold	NE SW 29-14N-4W	.07101709
427	Stanolind	Banks	NW SE 29-14N-4W	.05931834
428	Stanolind	Banks	NE SE 29-14N-4W	.02155457
429	Peppers	Ella McDowell	NW SW 28-14N-4W	.08296604
430	Fox	McDowell	NE SW 28-14N-4W	.10497911

431	Peppers	Deal	NW SE 28-14N-4W	.12187383
432	Anderson-Prichard	Deal	NE SE 28-14N-4W	.11625109
433	Sohio	Patten	NW SW 27-14N-4W	.09130954
434	Stanolind	Patten	NE SW 27-14N-4W	.10782802
435	Stanolind	Hunsicker	SE SE 25-14N-5W	.11488627
436	Skelly	Spivey	SW SW 30-14N-4W	.14482856
437	Skelly	Spivey	SE SW 30-14N-4W	.14583120
438	Sohio	Cargill	SW SE 30-14N-4W	.10897507
439	Sohio	Cargill	SE SE 30-14N-4W	.01093429
440	Peppers	Arnold	SW SW 29-14N-4W	.11731014
441	Peppers	Arnold	SE SW 29-14N-4W	.12970653
442	Stanolind	Banks	SW SE 29-14N-4W	.10004474
443	Stanolind	Banks	SE SE 29-14N-4W	.06055990
444	Peppers	Ella McDowell	SW SW 28-14N-4W	.06802684
445	Chudacoff	McDowell	SE SW 28-14N-4W	.01865707
446	Peppers	Deal	SW SE 28-14N-4W	.04010443
447	Anderson-Prichard	Dillon	SE SE 28-14N-4W	.06980498
448	Sohio	Patten	SW SW 27-14N-4W	.08206855
449	Sohio	Harper	NW NE 31-14N-4W	.14364924
450	Sohio	Harper	NE NE 31-14N-4W	.13989486
451	Stanolind	J. Young	NW NW 32-14N-4W	.14590187
452	Denver	Young	NE NW 32-14N-4W	.14630825
453	Sohio	K. Young	NW NE 32-14N-4W	.14917039
454	Sohio	K. Young	NE NE 32-14N-4W	.14283976
455	Atkinson	French	NW NW 33-14N-4W	.15544242
456	Peppers	French	NE NW 33-14N-4W	.13411227
457	Peppers	Graham	NW NE 33-14N-4W	.10988815
458	Peppers	Williams	NE NE 33-14N-4W	.02271774
459	Fox	Spivey	SW NW 31-14N-4W	.14329589
460	Sohio	Spivey	SE NW 31-14N-4W	.15222690
461	Sohio	Harper	SW NE 31-14N-4W	.16233281
462	Sohio	Harper	SE NE 31-14N-4W	.15308378
463	Stanolind	J. Young	SW NW 32-14N-4W	.15385498
464	Denver	J. Young	SE NW 32-14N-4W	.15235057
465	Sohio	J. Young	SW NE 32-14N-4W	.15289650
466	Sohio	J. Young	SE NE 32-14N-4W	.10520710
467	Atkinson	French	SW NW 33-14N-4W	.14647739
468	Peppers	French	SE NW 33-14N-4W	.13275882
469	Peppers	Earl McDowell	SW NE 33-14N-4W	.12511585
470	Peppers	Earl McDowell	SE NE 33-14N-4W	.11616717
471	Denver	Cargill "B"	SW NW 34-14N-4W	.10409131

BLEED THROUGH

BLURRED COPY

[7480]

Tract	Operator	Lease	Description	Percentage Interest in Unit
472	Peppers	Meeker	NE SW 31-14N-4W	.15676749
473	Sohio	Ringer	NW SE 31-14N-4W	.17007125
474	Sohio	Ringer	NE SE 31-14N-4W	.15808561
475	Fox-Schmitz	Wagner	NW SW 32-14N-4W	.15765088
476	Fox-Schmitz	Wagner	NE SW 32-14N-4W	.16042470
477	Peppers	Young	NW SE 32-14N-4W	.16175684
478	McMahon	Young	NE SE 32-14N-4W	.14844721
479	Wegener	Flynn	NW SW 33-14N-4W	.13678093
480	Wegener	Flynn	NE SW 33-14N-4W	.10356570
481	Sohio	McDowell 511	NW SE 33-14N-4W	.10644265
482	Sohio	McDowell "B"	NE SE 33-14N-4W	.12933842
483	Denver	Cargill "A"	NW SW 34-14N-4W	.11889506
484	Denver	Cargill "A"	NE SW 34-14N-4W	.04368605
485	Amerada	Meeker	SW SW 31-14N-4W	.11302386
486	Peppers	Meeker	SE SW 31-14N-4W	.07435884
487	Magnola	Ringer	SW SE 31-14N-4W	.17079121
488	Magnolia	Ringer	SE SE 31-14N-4W	.16833982
489	Fox-Schmitz	Wagner	SW SW 32-14N-4W	.16915695
490	Fox-Schmitz	Wagner	SE SW 32-14N-4W	.16911499
491	Peppers	Young	SW SE 32-14N-4W	.16304305
492	McMahon	Burns	SE SE 32-14N-4W	.15863143
493	Peppers	Flynn	SW SW 33-14N-4W	.16603551
494	Peppers	Flynn	SE SW 33-14N-4W	.13534272
495	Fox	McDowell	SW SE 33-14N-4W	.13500091
496	Sohio	McDowell "A"	SE SE 33-14N-4W	.13621998
497	Denver	Cargill "A"	SW SW 34-14N-4W	.11809668
498	Denver	Cargill "A"	SE SW 34-14N-4W	.03296296
499	Denver	Cargill "C"	SW SE 34-14N-4W	.02299557
500	Chudacoff	Meeker	NE NW 6-13N-4W	.14740362
501	Sinclair	Ringer Tract 1	NW NE 6-13N-4W	.16030103
502	Sinclair	Ringer Tract 1	NE NE 6-13N-4W	.17668780
503	Denver	Genzer	NW NW 5-13N-4W	.17974431
504	Sohio	Genzer	NE NW 5-13N-4W	.17794927
505	Wegener	Lenhart	NW NE 5-13N-4W	.17434683
506	Wegener	Lenhart	NE NE 5-13N-4W	.16888752
507	Fox	Keefer	NW NW 4-13N-4W	.15993884
508	Sohio	Keefer	NE NW 4-13N-4W	.14587995
509	Sohio	Habben	NW NE 4-13N-4W	.13996111
510	Sohio	Habben 512	NE NE 4-13N-4W	.13871554
511	Denver	Kuehne	NW NW 3-13N-4W	.11708765
512	Denver	Kuehne	NE NW 3-13N-4W	.05086133

513	Denver	Smith	NW NE	3-13N-4W	.04236776
514	Sinclair	Ringer Tract 2	SW NE	6-13N-4W	.14928081
515	Sinclair	Ringer Tract 2	SE NE	6-13N-4W	.17059245
516	Denver	Genzer	SW NW	5-13N-4W	.18354507
517	Sohio	Genzer	SE NW	5-13N-4W	.18276106
518	Wegener	Keefer Comm.	SW NE	5-13N-4W	.17587067

[7481]

Tract	Operator	Lease	Description		Percentage Interest in Unit
519	Wegener	Keefer Comm.	SE NE	5-13N-4W	.17678320
520	Peppers	Keefer	SW NW	4-13N-4W	.17298228
521	Peppers	Keefer	SE NW	4-13N-4W	.15273536
522	Denver	Tegtmeyer	SW NE	4-13N-4W	.14023055
523	Denver	Tegtmeyer "B"	SE NE	4-13N-4W	.15568976
524	Denver	Kuehne	SW NW	3-13N-4W	.11661787
525	Denver	Kuehne	SE NW	3-13N-4W	.03577518
526	Denver	Smith	SW NE	3-13N-4W	.03270185
527	Peppers	Heidbrink	NW SE	6-13N-4W	.13425004
528	Peppers	Heidbrink	NE SE	6-13N-4W	.14991243
529	Mid-Continent	A. Q. Lynch	NW SW	5-13N-4W	.18062990
530	Mid-Continent	A. Q. Lynch	NE SW	5-13N-4W	.18614001
531	Wegener	Keefer	NW SE	5-13N-4W	.18351636
532	Wegener	Keefer	NE SE	5-13N-4W	.18264181
533	Magnolia	Lynch Est.	NW SW	4-13N-4W	.18059147
534	Magnolia	Lynch Est.	NE SW	4-13N-4W	.17302176
535	Denver	D. Barber	NW SE	4-13N-4W	.13482421
536	Denver	D. Barber	NE SE	4-13N-4W	.13734630
537	Denver	H. Barber	NW SW	3-13N-4W	.13999424
538	Denver	H. Barber	NE SW	3-13N-4W	.07131592
539	Denver	Bierschenk	NW SE	3-13N-4W	.06708869
540	Stanolind	Heidbrink	SE SE	6-13N-4W	.14469163
541	Mid-Continent	A. Q. Lynch	SW SW	5-13N-4W	.16644496
542	Mid-Continent	A. Q. Lynch	SE SW	5-13N-4W	.18439091
543	Sohio	Hassell	SW SE	5-13N-4W	.18762674
544	Fox	Hassell	SE SE	5-13N-4W	.18845006
545	Magnolia	Lynch Est.	SW SW	4-13N-4W	.18405522
546	Magnolia	Lynch Est.	SE SW	4-13N-4W	.16689991
547	Denver	D. Barber	SW SE	4-13N-4W	.13915282
548	Denver	D. Barber	SE SE	4-13N-4W	.12299749
549	Denver	H. Barber	SW SW	3-13N-4W	.09887902
550	Denver	H. Barber	SE SW	3-13N-4W	.11458591
551	Denver	Bierschenk	SW SE	3-13N-4W	.04305834

BLEED THROUGH

BLURRED COPY

552	Stanolind	Shinn	NW NW	8-13N-4W	.14348260
553	Peppers	Shinn	NE NW	8-13N-4W	.18384763
554	Peppers	Barber	NW NE	8-13N-4W	.18701456
555	Sohio	Barber	NE NE	8-13N-4W	.19521328
556	Sohio	Gray	NW NW	9-13N-4W	.18618375
557	Sohio	Hardy	NE NW	9-13N-4W	.18264181
558	Anderson-Prichard	Berry	NW NE	9-13N-4W	.16461547
559	Anderson-Prichard	Berry	NE NE	9-13N-4W	.12993471
560	Denver	T. Sitlington	NW NW	10-13N-4W	.06803716
561	Denver	T. Sitlington	NE NW	10-13N-4W	.07405916
562	Denver	S. Sitlington	NW NE	10-13N-4W	.11959591
563	Peppers	Shinn	SE NW	8-13N-4W	.18645802
564	Peppers	Barber	SW NE	8-13N-4W	.18471776
565	Sohio	Barber	SE NE	8-13N 4W	.18876366

[7482]

Tract	Operator	Lease	Description		Percentage Interest in Unit
566	Sohio	Gray	SW NW	9-13N-4W	.16157005
567	Sohio	Hardy	SE NW	9-13N-4W	.17340603
568	Champlin	Conneway	SW NE	9-13N-4W	.15933730
569	Champlin	Conneway	SE NE	9-13N-4W	.15235057
570	Denver	T. Sitlington	SW NW	10-13N-4W	.12443293
571	Denver	T. Sitlington	SE NW	10-13N-4W	.11217088
572	Denver	S. Sitlington	SW NE	10-13N-4W	.06194831
573	Denver	S. Sitlington	SE NE	10-13N-4W	.02703155
574	Anderson-Prichard	Mariner	NE SW	8-13N-4W	.17862683
575	Gulf	P. Paul	NW SE	8-13N-4W	.17949696
576	Gulf	A. Paul	NE SE	8-13N-4W	.18732816
577	Sohio	Hardy	NW SW	9-13N-4W	.18526546
578	Sohio	Hardy	NE SW	9-13N-4W	.17464718
579	Anderson-Prichard	Crookham "A"	NW SE	9-13N-4W	.17138396
580	Anderson-Prichard	Crookham "A"	NE SE	9-13N-4W	.15479755
581	Denver	Meeker	NW SW	10-13N-4W	.12374576
582	Denver	Meeker	NE SW	10-13N-4W	.13154688
583	Wegener	Meeker	NW SE	10-13N-4W	.13956094
584	Wegener	Meeker	NE SE	10-13N-4W	.11567603
585	Denver	Collett	NW SW	11-13N-4W	.02798542
586	Anderson-Prichard	Mariner	SE SW	8-13N-4W	.17775669
587	Gulf	A. Paul	SW SE	8-13N-4W	.17514629
588	Gulf	A. Paul	SE SE	8-13N-4W	.18091921
589	Sohio	Hardy	SW SW	9-13N-4W	.18383967
590	Sohio	Hardy	SE SW	9-13N-4W	.17897576

591	Anderson-Prichard	Crookham "A"	SW SE 9-13N-4W	.17231505
592	Anderson-Prichard	Crookham "A"	SE SE 9-13N-4W	.15765088
593	Denver	Meeker	SW SW 10-13N-4W	.10036327
594	Denver	Meeker	SE SW 10-13N-4W	.13648941
595	Wegener	Meeker	SW SE 10-13N-4W	.12929425
596	Mid-Continent	Jones	NE NW 17-13N-4W	.12760599
597	Anderson-Prichard	Crookham	NW NE 17-13N-4W	.17242547
598	Anderson-Prichard	Crookham	NE NE 17-13N-4W	.17819397
599	Phillips	Bluff "A"	NW NW 16-13N-4W	.17637861
600	Phillips	Bluff "A"	NE NW 16-13N-4W	.17328677
601	Phillips	Bluff "B"	NW NE 16-13N-4W	.14008037
602	Phillips	Bluff "B"	NE NE 16-13N-4W	.12269712
603	Midstates	McClure	NW NW 15-13N-4W	.13413078
604	Midstates	McClure	NE NW 15-13N-4W	.11318133
605	Denver	Johnston	NW NE 15-13N-4W	.04406285
606	Mid-Continent	Jones	SE NW 17-13N-4W	.12876422
607	Anderson-Prichard	Crookham	SW NE 17-13N-4W	.15864468
608	Anderson-Prichard	Crookham	SE NE 17-13N-4W	.17242547
609	Phillips	Bluff "A"	SW NW 16-13N-4W	.17536272
610	Phillips	Bluff "A"	SE NW 16-13N-4W	.17265073
611	Phillips	Bluff "B"	SW NE 16-13N-4W	.15896067
612	Phillips	Bluff "B"	SE NE 16-13N-4W	.14947958

[7483]

Tract	Operator	Lease	Description	Percentage Interest in Unit
513	Midstates	McClure	SW NW 15-13N-4W	.14407327
514	Midstates	McClure	SE NW 15-13N-4W	.11690479
515	Denver	Johnston	SW NE 15-13N-4W	.01162533
516	Stanolind	Lowenstein	NE SW 17-13N-4W	.11889565
517	Phillips	Crookham	NW SE 17-13N-4W	.16772145
518	Phillips	Crookham	NE SE 17-13N-4W	.17242547
519	Magnolia	Motter Heirs	NW SW 16-13N-4W	.16901782
520	Magnolia	Motter Heirs	NE SW 16-13N-4W	.16685132
521	Phillips	Bluff "C"	NW SE 16-13N-4W	.14648896
522	Phillips	Bluff "C"	NE SE 16-13N-4W	.15418989
523	Stanolind	West	NW SW 15-13N-4W	.13685789
524	Stanolind	West	NE SW 15-13N-4W	.11216408
525	Phillips	Crookham	SW SE 17-13N-4W	.17031860
526	Phillips	Crookham	SE SE 17-13N-4W	.17229296
527	Magnolia	Motter Heirs	SW SW 16-13N-4W	.16547766
528	Magnolia	Motter Heirs	SE SW 16-13N-4W	.16261991
529	Phillips	Bluff "C"	SW SE 16-13N-4W	.15257142

BLEED THROUGH

BLURRED COPY

630	Phillips	Bluff "C"	SE SE 16-13N-4W	.14508916
631	Stanolind	West	SW SW 15-13N-4W	.11948869
632	Stanolind	West	SE SW 15-13N-4W	.04726086
633	Tide Water	Motter	NW NE 20-13N-4W	.17775669
634	Tide Water	Motter	NE NE 20-13N-4W	.16992550
635	Anderson-Prichard	Perdue	NW NW 21-13N-4W	.16036286
636	Anderson-Prichard	Perdue	NE NW 21-13N-4W	.15155553
637	Magnolia	Holloway	NW NE 21-13N-4W	.13862279
638	Magnolia	Holloway	NE NE 21-13N-4W	.14360507
639	Peppers	Anderson	NW NW 22-13N-4W	.12593121
640	Peppers	Anderson	NE NW 22-13N-4W	.08157403
641	Stanolind	Edney	SE NW 20-13N-4W	.17914361
642	Tide Water	Motter	SW NE 20-13N-4W	.17914361
643	Tide Water	Motter	SE NE 20-13N-4W	.17389631
644	Anderson-Prichard	Perdue	SW NW 21-13N-4W	.16079572
645	Anderson-Prichard	Perdue	SE NW 21-13N-4W	.14820574
646	Magnolia	Holloway	SW NE 21-13N-4W	.13928091
647	Magnolia	Holloway	SE NE 21-13N-4W	.13455922
648	Peppers	Anderson	SW NW 22-13N-4W	.12245686
649	Peppers	Anderson	SE NW 22-13N-4W	.08743970
650	Gulf	Streeter	NW SE 20-13N-4W	.18134323
651	Gulf	Streeter	NE SE 20-13N-4W	.18194393
652	Gulf	Flynn	NW SW 21-13N-4W	.15597951
653	Gulf	Flynn	NE SW 21-13N-4W	.14757588
654	Stanolind	Parman "A"	NW SE 21-13N-4W	.13145059
655	Stanolind	Parman "A"	NE SE 21-13N-4W	.12346392
656	Phillips	Halmbacher	NW SW 22-13N-4W	.12908887
657	Phillips	Halmbacher	NE SW 22-13N-4W	.03159439
658	Gulf	Streeter	SW SE 20-13N-4W	.17222671
659	Gulf	Streeter	SE SE 20-13N-4W	.18939969
660	Gulf	Flynn	SW SW 21-13N-4W	.17503587

[7484]

Tract	Operator	Lease	Description	Percentage Interest in Unit
661	Gulf	Flynn	SE SW 21-13N-4W	.14694426
662	Stanolind	Parman "A"	SW SE 21-13N-4W	.14636123
663	Stanolind	Parman "A"	SE SE 21-13N-4W	.14758030
664	Phillips	Halmbacher	SW SW 22-13N-4W	.13092851
665	Magnolia	Lay	NW NE 29-13N-4W	.13609631
666	Magnolia	Lay	NE NE 29-13N-4W	.19236786
667	Magnolia	Talbot	NW NW 28-13N-4W	.18721067
668	Magnolia	Talbot	NE NW 28-13N-4W	.17788037

669	Stanolind	Parman "B"	NW NE 28-13N-4W	.17952788
670	Stanolind	Parman "B"	NE NE 28-13N-4W	.13482424
671	Stanolind	Parman "C"	NW NW 27-13N-4W	.05428060
672	Magnolia	Lay	SW NE 29-13N-4W	.19685810
673	Magnolia	Lay	SE NE 29-13N-4W	.19060110
674	Magnolia	Talbot	SW NW 28-13N-4W	.17536272
675	Magnolia	Talbot	SE NW 28-13N-4W	.15265092
676	Stanolind	Parman "B"	SW NE 28-13N-4W	.15301311
677	Stanolind	Parman "B"	SE NE 28-13N-4W	.12443564
678	Phillips	Luf	NE SW 29-13N-4W	.14863765
679	Phillips	Lufkin	NW SE 29-13N-4W	.19669644
680	Phillips	Lufkin	NE SE 29-13N-4W	.18828221
681	Phillips	Stinchcomb	NW SW 28-13N-4W	.17730617
682	Cities Service	Stinchcomb "A"	NE SW 28-13N-4W	.15768798
683	Cities Service	Stinchcomb "C"	NW SE 28-13N-4W	.16329570
684	Cities Service	Stinchcomb "D"	NE SE 28-13N-4W	.13940988
685	Stanolind	Replogle "A"	NW SW 27-13N-4W	.01651928
686	Phillips	Lufkin	SW SE 29-13N-4W	.18945270
687	Phillips	Lufkin	SE SE 29-13N-4W	.20852760
688	Phillips	Stinchcomb	SW SW 28-13N-4W	.20644900
689	Cities Service	Stinchcomb "A"	SE SW 28-13N-4W	.19462049
690	Cities Service	Stinchcomb "B"	SW SE 28-13N-4W	.18227962
691	Cities Service	Emerson "B"	SE SE 28-13N-4W	.18367537
692	Stanolind	Replogle "B"	SW SW 27-13N-4W	.15826571
693	Phillips	Orphanage	NW NE 32-13N 4W	.19102512
694	Phillips	Orphanage	NE NE 32-13N-4W	.20787125
695	Phillips	Piersol	NW NW 33-13N-4W	.18784935
696	Phillips	Piersol	NE NW 33-13N-4W	.19487667
697	Stanolind	Urschel	NW NE 33-13N-4W	.16007400
698	Stanolind	Urschel	NE NE 33-13N-4W	.16320736
699	Midstates	AndersonUnit	NW NW 34-13N-4W	.13286279
700	Phillips	Orphanage	SE NE 32-13N-4W	.19466466
701	Phillips	Piersol	SW NW 33-13N-4W	.20888714
702	Phillips	Piersol	SE NW 33-13N-4W	.17482386
703	Stanolind	Urschel	SW NE 33-13N-4W	.15968708
704	Stanolind	Urschel	SE NE 33-13N-4W	.15086649
705	Midstates	Anderson	SW NW 34-13N-4W	.13863339
706	Magnolia	Reust	NE SE 32-13N-4W	.18295982
707	Stanolind	Dietz "A"	NW SW 33-13N-4W	.19763283
708	Phillips	Specht	NE SW 33-13N-4W	.18778752

BLEED THROUGH

BLURRED COPY

[7485]

Tract	Operator	Lease	Description	Percentage Interest in Unit
709	Magnolia	Whetstone	NW SE 33-13N-4W	.15722862
710	Stanolind	Y. M. C. A.	NE SE 33-13N-4W	.13046032
711	Stanolind	Shellenberger	NW SW 34-13N-4W	.12046042
712	Stanolind	Dietz "B"	SW SW 33-13N-4W	.18136973
713	Phillips	Specht	SE SW 33-13N-4W	.17677040
714	Magnolia	Whetstone Unit	SW SE 33-13N-4W	.14579586
715	Stanolind	Y. M. C. A. Unit	SE SE 33-13N-4W	.12227577
716	Stanolind	Gaylord	NE NE 5-12N-4W	.14839268
717	Deep Rock	Tolbert	NW NW 4-12N-4W	.19109579
718	Deep Rock	Tolbert	NE NW 4-12N-4W	.16228864
719	Champlin	Campbell	NW NE 4-12N-4W	.12887023
720	Stanolind	Evans	NE NE 4-12N-4W	.11911767
721	Stanolind	Gaylord	SE NE 5-12N-4W	.14666158
722	Deep Rock	Tolbert	SW NW 4-12N-4W	.17386141
723	Deep Rock	Tolbert	SE NW 4-12N-4W	.14638773
724	Champlin	Campbell	SW NE 4-12N-4W	.12606990
725	Stanolind	Evans Unit	SE NE 4-12N-4W	.11816362
726	Stanolind	Gaylord	NE SE 5-12N-4W	.15195305
727	British-American	Tom Tom Ranch	NW SW 4-12N-4W	.16777446
728	British-American	Tom Tom Ranch	NE SW 4-12N-4W	.16930492
729	Magnolia	Twin Lakes	NW SE 4-12N-4W	.12353017
730	Magnolia	Twin Lakes	NE SE 4-12N-4W	.10596762
731	Stanolind	Gaylord	SE SE 5-12N-4W	.15001844
732	British-American	Tom Tom Ranch	SW SW 4-12N-4W	.16898911
733	British-American	Tom Tom Ranch	SE SW 4-12N-4W	.18176726
734	Phillips	Mee	SW SE 4-12N-4W	.12505401
735	Phillips	Airport	NE NE 8-12N-4W	.11353045
736	Stanolind	Harris	NW NW 9-12N-4W	.15579306
737	Phillips	Dole	NE NW 9-12N-4W	.16939237
738	Stanolind	Halbert	NW NE 9-12N-4W	.15932047
739	Sinclair	Clausewitz	NE NE 9-12N-4W	.14113160
740	Magnolia	Housel	NW NW 10-12N-4W	.15076048
741	Magnolia	Housel	SW NW 10-12N-4W	.13574296
				100.00000000

[7486]

EXHIBIT "C"

ACCOUNTING PROCEDURE

I.

DEVELOPMENT AND OPERATING CHARGES

Subject to the limitations herein contained, the costs and expenses to be charged as Unit Expense under the Plan of Unitization for the West Edmond Hunton Lime Unit shall include amounts expended by Unit Operator for the following:

(1) Materials, equipment and supplies purchased for use on the Unit Area or for the development and operation thereof. In so far as it is practical and consistent with efficient and economical operation, only such materials shall be purchased for the Unit Area as are required for immediate use and the accumulation of warehouse stocks on the Unit Area shall be avoided, unless authorized by the Operating Committee.

(2) Moving materials to the Unit Area from railway receiving point or from nearest reliable supply store.

(3) Moving surplus materials from the Unit Area to outside vendees, if sold f. o. b. destination.

(4) The salaries and wages or other compensation of employees of Unit Operator who perform duties for Unit Operator only on, or in connection with the development and operation of, the Unit Area, including all personnel up to and including the operating general manager of the Unit Area, together with so-called

BLEED THROUGH

BLURRED COPY

"Social Security" taxes and any and all other taxes or governmental charges imposed by governmental authority, whether federal, state or local, and payable by Unit Operator upon or in respect of such salaries, wages or other compensation.

(5) The acquistion, maintenance and operation of camp facilities, warehouse facilities and office facilities on, or in connection with the development and operation of, the Unit Area and the acquisition of which is authorized or approved by the Operating Committee, all such facilities to be used exclusively in connection with operations conducted pursuant to the Plan of Unitization.

[7487]

(6) Trucking, teaming and like services required in the conduct of operations pursuant to the Plan of Unitization.

(7) Engineering, geological and other technical services obtained from outside sources with the approval of the Operating Committee.

(8) Use of and service by Unit Operator's exclusively owned equipment and utilities, as provided in Section II entitled "Basis of Charges to Unit Expense".

(9) Damage or losses incurred by fire, flood, storm, or any other cause not controllable by Unit Operator through the exercise of reasonable diligence. Unit Operator shall furnish the Operating Committee written notice of damages or losses incurred by fire, flood, storm, or other natural or accidental cause as soon as practicable after the happening thereof.

(10) Litigation, liens, judgments and liquidated claims involving the Unit Area or incident to the conduct of operations pursuant to the Plan of Unitization, including actual expenses incurred by Unit Operator in securing evidence for use in any such litigation. In event of litigation affecting the Unit Area, or the joint interests of Lessees, within the Unit Area, or arising out of operations conducted pursuant to the Plan of Unitization, the Operating Committee may authorize the employment of outside counsel whose fees and expenses shall be paid by Unit Operator and charged as Unit Expense, or the Operating Committee may authorize the use of Unit Operator's legal staff, in which event the compensation and expenses of members of Operator's legal staff for time devoted to such litigation shall be charged as Unit Expense.

(11) Insurance authorized or approved by the Operating Committee and all actual expenditures incurred and paid by Unit Operator in settlement or satisfaction of claims, judgments, losses and damages to the extent that the same are not covered by insurance authorized or approved by the Operating Committee. Unit Operator shall not pay in excess of Five Hundred Dollars ($500.00) to settle or compromise any claim involving the Unit Area or arising out of the operations conducted pursuant to the Plan of Unitization without first obtaining the approval of the Operating Committee.

(12) Taxes paid by Unit Operator for the benefit of the Lessees within the Unit Area, including ad valorem, property,

[7488]

gross production, occupation and any other taxes assessed against the Unit Area or any jointly owned

BLEED THROUGH

BLURRED COPY

property of any kind, the production from the Unit Area or the operations carried on pursuant to the Plan of Unitization.

(13) Overhead charges, which shall be in lieu of any charge for any part of the staff and expenses of Unit Operator's district office, division office and principal business office, wherever located, and in lieu of the compensation or salaries paid to managing officers and employees of Unit Operator (other than compensation, salaries and expenses of employees of Unit Operator provided for in Subdivision (4) hereof), but not in lieu of Unit Aea field office expenses in connection with operations conducted pursuant to the Plan of Unitization, and not in lieu of any other expenses incurred by Unit Operator in operations conducted pursuant to the Plan of Unitization to the extent that the same are a proper direct charge to Unit Expense in accordance with accepted accounting practices, which overhead charges shall be as follows:

1. $13.00 per well per month for all wells producing from the Unit Area at any time during the month.
2. $6.00 per well per month for all wells in the Unit Area which are not in production at any time during the month.

For the purpose of computing said overhead charges, the status of wells shall be as follows:

(a) Input or key wells and gas wells shall be included in the overhead schedule the same as producing oil wells.

(b) Wells permanently shut down but on which plugging operations are deferred shall be

dropped from the overhead schedule at the time the shut down is effected, and no overhead shall be charged in connection with the plugging operations when performed.

(c) Salt water disposal wells shall not be included in the overhead schedule.

The overhead charges above provided for may be increased or decreased from time to time by agreement between Unit Operator and the Operating Committee if in practice they are found to be greater or less than the indirect expenses in lieu of which they are allowed. At the end of two years after the Effective Date of the Plan of Unitization the overhead rates

[7489]

above specified shall be reduced to $10.00 per well per month for wells in production at any time during the month and $5.00 per well per month for wells not in production during the month, unless the Operating Committee specifically approves overhead charges at higher rates, after submission by Unit Operator of acceptable evidence that the charging of higher rates is reasonably required to cover the indirect expenses in lieu of which the overhead charges are allowed.

(14) Any other necessary and reasonable expenditure made by Unit Operator in the conduct of operations pursuant to the Plan of Unitization or for the maintenance or protection of the Unit Area or property of any kind owned jointly by the Lessees within the

BLEED THROUGH

BLURRED COPY

Unit Area, except that Unit Operator shall not charge as Unit Expense any expenditure or contribution made by Unit Operator toward any stock purchase plan, group life insurance, pension, retirement or bonus for employees of Unit Operator, other than expenditures or contributions which are imposed or assessed by governmental authority and other than such bonuses as may be authorized by the Operating Committee.

II.

BASIS OF CHARGES TO UNIT EXPENSE

(1) All materials and equipment purchased by Unit Operator for the Unit Area shall be procured from outside sources and shall be charged at their actual cost to Unit Operator after deducting any and all trade or cash discounts actually allowed off invoices or received by Unit Operator; Unit Operator may furnish materials or equipment from its own stocks only with the approval of the Operating Committee, on such basis as may be specified by the Operating Committee.

(2) Materials and equipment purchased from outside sources or furnished by Unit Operator from its own stocks, with the approval of the Operating Committee, shall not be warranted by Unit Operator beyond or back of the dealer's or manufacturer's guarantee, and in case of defective materials, credit shall not be passed until adjustment has been received by Unit Operator from the dealer or manufacturer.

(3) All services procured from outside sources shall be charged at their actual cost to Operator, after deducting any and all cash or other discounts actually allowed off invoices or received by Unit Operator.

(4) It is contemplated that all automotive equipment and other equipment and facilities required in the conduct of operations pursuant

[7490]

to the Plan of Unitization will be acquired, maintained and operated at Unit Expense, and that Unit Operator's exclusively owned equipment and facilities will be used in the conduct of such operations only if and when jointly owned equipment and facilities are inadequate or unavailable. For the use of Unit Operator's exclusively owned equipment and facilities, the following rates shall apply:

1. Water, gas, teaming, power and compressor service shall be charged at rates prevailing in the locality of the Unit Area.
2. Rates for automotive equipment shall be commensurate with cost of ownership and operation and in line with the schedule of rates adopted by the Petroleum Motor Transport Association as recommended uniform and standardized charges and in effect from time to time charges to be based on use in actual service on the Unit Area or in connection with the operations provided for in the Plan of Unitization. Truck, tractor and pulling unit rates shall include rates and expenses of drivers.
3. Rates for the use of drilling and cleaning out tools and other items of Unit Operator's exclusively owned machinery or equipment shall be sufficient to cover maintenance, repairs, depreciation and service furnished, but not in excess of rates prevailing in the locality of the Unit Area.

BLEED THROUGH

BLURRED COPY

III.

DISPOSITION OF SURPLUS MATERIALS AND EQUIPMENT

(1) Jointly owned materials and equipment shall be classed as surplus only with the approval of the Operating Committee, and materials and equipment so classed as surplus shall be disposed of or divided in kind in such manner and on such basis as may be authorized by the Operating Committee.

IV.

INVENTORIES

(1) Inventories of materials and equipment on the Unit Area shall be taken at such times (not oftener than annually) and in such manner as may be directed from time to time by the Operating Committee. Each inventory shall include such materials and equipment as are ordinarly considered controllable by Operators of oil and gas properties.

(2) Reconciliation of inventory with charges to Unit Expense shall be made in such manner as may be directed by the Operating Committee from time to time.

(3) Inventory adjustments shall be made by Unit Operator for overages and shortages, but Unit Operator shall be held accountable only for shortages due to lack of reasonable diligence.

[7492]

EXHIBIT "D"

PROCESSING AND COMPRESSION OF GAS DEFINITIONS

As used in this Exhibit "D":

A. The term "Unit gas" shall mean gas produced and saved from the Unit Area and not required in the conduct of operations provided for in said Plan of Unitization.

B. The term "liquids" shall mean unstabilized propane and heavier liquid hydrocarbons extracted from gas by processing as herein provided.

C. The term "liquid products" shall mean and include 26-70 natural gasoline, excess butane and propane.

D. The term "excess butane" shall mean and include butane in excess of that which is required to produce 26-70 natural gasoline.

E. The terms "26-70 natural gasoline", "butane" and "propane" shall mean the commercial liquids respectively defined as such according to the latest definitions issued by the Natural Gasoline Association of America from time to time, except that if at any time said Association should cease to define any of said terms, such of said terms as are no longer defined by said Association shall have the meaning generally accepted in the industry from time to time thereafter.

F. The term "residue gas" shall mean that portion of the gas remaining after extraction of the liquids therefrom, but shall not include any part thereof which is reasonably required in the operation of facilities used in the processing of gas.

BLEED THROUGH

BLURRED COPY

G. The term "Unit residue gas" shall mean residue gas allocated to Unit gas, as hereinafter provided.

H. A "cubic foot" of residue gas shall be that quantity of residue gas which occupies one cubic foot of space at an absolute pressure of sixteen and four-tenths (16.4) pounds per square inch and at a temperature of 60° Fahrenheit without correction for deviation from Boyle's law.

I. A "standard cubic foot" of gas shall be that quantity of gas which occupies one cubic foot of space at a pressure of four (4) ounces above an assumed atmospheric pressure of fourteen and four-tenths (14.4) pounds per square inch and at a temperature of 60° Fahrenheit.

[7493]

PART I

THE PROCESSING OF UNIT GAS BY PHILLIPS PETROLEUM COMPANY AND CONTINENTAL OIL COMPANY

ARTICLE I.

DEFINITIONS

As used in this Part I:

A. The term "Plant Owner" shall mean Phillips Petroleum Company and Continental Oil Company, and their respective successors and assigns.

B. The term "plant facilities" shall mean and include the gas processing plant and facilities now owned by Plant Owner and located in and adjacent to the Unit Area including all the gas receiving and gathering facil-

ities, residue gas delivery facilities, residue gas dehydration and compression facilities and all other facilities appurtenant thereto, and all additions thereto herein provided to be made by Plant Owner.

ARTICLE II.

PLANT FACILITIES

1. The plant facilities to be provided by Plant Owner shall include the following:

A. All facilities required for the receipt and gathering of Unit gas in Townships 13 and 14 in the Unit Area; and

B. Additions to Plant Owner's present processing, dehydration and compression facilities,

to the end that the plant facilities shall have sufficient capacity to gather, receive and process approximately 125,000,000 standard cubic feet of gas per day, delivered from oil and gas separators at a pressure of forty (40) pounds per square inch gauge, and to dehydrate and deliver at a pressure of five hundred (500) pounds per square inch gauge, approximately 70,000,000 cubic feet of residue gas per day.

2. The plant facilities to be provided by Plant Owner shall also include the facilities specified in Part III of this Exhibit "D".

3. The plant facilities shall be provided, maintained and operated by Plant Owner at Plant Owner's expense except as otherwise hereinafter specifically provided. Use of the plant facilities, as

BLEED THROUGH

BLURRED COPY

they may exist from time to time, shall be confined to the gathering and processing of Unit gas, except as follows:

A. Plant Owner shall have the right to use the plant facilities for the receipt and processing of approximately 5,500,000 standard cubic feet of gas per day from the presently producing horizons in the Edmond Field and in the Britton Field, in the vicinity of Plant Owner's processing plant.

B. If at any time the capacity of the plant facilities should be substantially in excess of the quantity of Unit gas, plus the quantity of said Edmond and Britton Fields gas then deliverable to Plant Owner, Plant Owner shall have the right to receive and process in the plant facilities, gas from other sources, to the extent of the excess of the capacity of the then existing plant facilities over the quantity of Unit gas and said Edmond and Britton Fields gas then deliverable to Plant Owner; provided, however, that residue gas from the gas from such other sources so received and processed shall not be marketed by Plant Owner except to the extent that the market demand for residue gas from Plant Owner's processing plant may be in excess of the quantity of Unit residue gas and said Edmond and Britton Fields residue gas available for sale at Plant Owner's processing plant.

C. If Plant Owner should increase the capacity of the plant facilities for the purpose of receiving and processing gas other than Unit gas, Plant Owner shall have the right to receive and process gas other than Unit gas to the extent of the increased capacity provided for such other gas, but Plant Owner shall not sell or contract to sell residue gas from such other gas except to

the extent that the market demand for residue gas from Plant Owner's processing plant at the time of such sale or the making of such contract to sell may be in excess of the quantity of Unit residue gas and said Edmond and Britton Fields residue gas available for sale at Plant Owner's processing plant.

The capacity of the plant facilities herein specified to be provided by Plant Owner, minus the quantity of gas (other than Unit gas), which Plant Owner is permitted to receive in accordance with this Section 3, is hereinafter referred to as the "available capacity" of the plant facilities.

ARTICLE III.

QUANTITY OF UNIT GAS DELIVERABLE TO PLANT OWNER

1. There shall be delivered to Plant Owner for processing, in each month, a quantity of Unit gas equal to the lesser of (a) the available capacity of the plant facilities during such month, or (b) two-thirds

(2/3) of the Unit gas produced and saved during such month. However if at any time the available capacity of the plant facilities should exceed two-thirds (2/3) of the Unit gas then being produced and saved, and if the available capacity of the processing plant and gathering facilities referred to in Part II hereof should be less than one-third (1/3) of the Unit gas then being produced and saved, then, during the time such condition continues, there shall be delivered to Plant Owner for processing a daily quantity of Unit gas equal to the lesser of (a) the available capacity of

BLEED THROUGH

BLURRED COPY

the plant facilities, or (b) the total quantity of Unit gas then being produced and saved, minus the available capacity of the processing plant and gathering facilities referred to in Part II hereof.

2. The Unit gas deliverable to Plant Owner shall be delivered in accordance with Part III hereof.

3. The Unit gas received by Plant Owner shall be processed by Plant Owner for the extraction of all liquids economically recoverable therefrom by the efficient operation of the installed plant facilities in accordance with customary and accepted practices in the operation of like facilities.

ARTICLE IV.

APPORTIONMENT OF LIQUIDS

1. The quantity of liquids recovered from the Unit gas delivered to Plant Owner in each month shall be determined as follows:

A. The quantity of liquids recoverable from the Unit gas delivered to Plant Owner during the month shall be calculated by testing samples of such Unit gas to determine the test gallons recoverable per thousand cubic feet thereof and multiplying the quantity so determined by the number of thousands of cubic feet of Unit gas delivered to Plant Owner during the month.

B. The quantity of liquids recoverable from gas (other than Unit gas) delivered to Plant Owner during the month shall be calculated by testing samples of such other gas to determine the test gallons recoverable per thousand cubic feet thereof and multiplying

the quantity so determined by the number of thousands of cubic feet of such other gas delivered to Plant Owner during the month.

C. The total quantity of liquids actually recovered during the month shall be apportioned between Unit gas and other gas in the ratio that the quantity of liquids calculated to be recoverable from the Unit gas delivered to Plant Owner during the month, as provided in A. above, bears to the quantity of

[7496]

liquids calculated to be recoverable from all other gas received by Plant Owner during the month, as provided in B. above.

D. The quantity of liquids apportioned to Unit gas for the month, in accordance with Subdivision C. hereof, shall be deemed to constitute the quantity of liquids recovered from Unit gas during the month.

2. The quantity of each liquid product contained in the liquids recovered from Unit gas in each month shall be determined by making a test or tests of a representative composite sample or samples of all the liquid hydrocarbons actually recovered from all gas processed in the plant facilities during the month and by applying the results of such test to the quantity of liquids recovered from Unit gas during each month. Such test shall be made once a month, or oftener if requested by either party, in accordance with customary and accepted practices and in such manner as to determine, as accurately as reasonably possible, the quantity of each liquid product contained in such liquids.

3. As full compensation to Plant Owner for the gathering and processing of the Unit gas delivered to Plant Owner

BLEED THROUGH

BLURRED COPY

in each month, and for the delivery of Unit residue gas (other than that deliverable at a pressure of five hundred (500) pounds per square inch gauge) as hereinafter provided, Plant Owner shall own and be entitled to retain that percentage of the liquids recovered from the Unit gas during such month which is applicable for such month, on the basis of the weighted average value (determined as hereinafter provided) per gallon of the liquids recovered from Unit gas during such month, in accordance with the following table:

Weighted Average Value Per Gallon of Liquids	Plant Owner's Percentage
Less than 1.25¢	88.46
1.25¢, but less than 1.50¢	86.10
1.50¢, but less than 1.75¢	83.70
1.75¢, but less than 2.00¢	81.70
2.00¢, but less than 2.25¢	79.80
2.25¢, but less than 2.50¢	78.20
2.50¢, but less than 2.75¢	76.85
2.75¢, but less than 3.00¢	75.65

[7497]

3.00¢, but less than 3.25¢	74.60
3.25¢, but less than 3.50¢	73.70
3.50¢, but less than 3.75¢	72.80
3.75¢, but less than 4.00¢	72.00
4.00¢, but less than 4.25¢	71.30
4.25¢, but less than 4.50¢	70.50

4.50¢, but less than 4.75¢	69.75
4.75¢, but less than 5.00¢	68.95
5.00¢, but less than 5.25¢	68.20
5.25¢, but less than 5.50¢	67.45
5.50¢, but less than 5.75¢	66.65
5.75¢, but less than 6.00¢	65.85
6.00¢ and above	65.10

4. The weighted average value per gallon of the liquids recovered from Unit gas during any month shall be the higher of the following prices:

A. The weighted average price per gallon received by Plant Owner for any such liquids sold by them during such month to a bona fide purchaser or purchasers in a bona fide sale or sales, and delivered in the form in which recovered in Plant Owner's processing plant, less transportation charges thereon if delivery thereof is made elsewhere than at or in the immediate vicinity of said processing plant and if such charges are included in the price received by Plant Owner; or

B. The weighted average price per gallon of the liquid products contained in such liquids, calculated as follows:

(1) Multiply the price applicable to 26-70 natural gasoline for such month by 100% of the number of gallons of 26-70 natural gasoline contained in such liquids;

(2) Multiply the price applicable to butane for such month by 75% of the number of gallons of excess butane contained in such liquids;

BLEED THROUGH

BLURRED COPY

(3) Multiply the price applicable to propane for such month by 50% of the number of gallons of propane contained in such liquids:

(4) Divide the total of the three amounts obtained by the multiplications above provided for by the total number of gallons comprised in 100% of the 26-70 natural gasoline, 75% of the excess butane and 50% of the propane contained in such liquids, the quotient thus obtained being such weighted average price.

For the purposes of the foregoing calculation, the quantity of each liquid product contained in such liquids shall be as determined in accordance with Section 2 of this ARTICLE IV, and the prices applicable thereto shall be the following:

(1) The price per gallon of 26-70 natural gasoline for such month shall be one-fourth cent (1/4¢) less than the daily average of the low prices quoted during such month for 26-70 natural gasoline or the nearest equivalent thereof, for Group III, in The National Petroleum News or in such other publication of like nature as may hereafter succeed said The National Petroleum News and whose quotations are generally accepted in the industry as accurate; provided, however, that if neither The National Petroleum News nor any such successor publication should publish quotations for 26-70 natural gasoline or its nearest equivalent for Group III, then the price of 26-70 natural gasoline for such month shall be one-fourth cent (1/4¢) per gallon less than the daily average market price of such natural gasoline or its nearest equivalent as determined by bona fide sales

made during the month in the area comprising Group III.

(2) The price per gallon of excess butane for such month shall be one-fourth cent (1/4¢) less than the weighted average price received by Phillips Petroleum Company for all butane sold by it during the month and delivered from its fractionating plant in Oklahoma City to bona fide purchasers f. o. b. railroad tank cars.

(3) The price per gallon of propane for such month shall be one-fourth cent (1/4¢) less than the weighted average price received by Phillips Petroleum Company for all propane sold by it during the month and delivered from its fractionating plant in Oklahoma City to bona fide purchasers f. o. b. railroad tank cars.

5. That portion of the liquids recovered from Unit gas in each month which remains after deduction of the percentage thereof which becomes the property of Plant Owner as above provided, shall constitute Unit Production and shall be allocated as such in accordance with the Plan of Unitization.

* * *

[7526]

RESIDUE GAS AGREEMENT

THIS AGREEMENT made this *1st* day of .....

by and between .....

.....

.....

hereinafter called "Lessee" (whether one or more, and

BLEED THROUGH

BLURRED COPY

PHILLIPS PETROLEUM COMPANY and CONTINENTAL OIL COMPANY, hereinafter together referred to as "Plant Owners",

WITNESSETH, That

WHEREAS, the Corporation Commission of Oklahoma has heretofore approved the Plan of Unitization for the West Edmond Hunton Line Unit and Exhibit "D" attached to and made part of said Plan of Unitization provides among other things for the processing by Plant Owners of gas produced from the Unit Area for the recovery of liquids therefrom and for the retention by Plant Owners of a portion of such liquids as compensation for the processing of said gas, the balance of such liquids, together with the residue gas remaining from said gas and not taken by the Unit for injection or other operating purposes, to be allocated as Unit Production to and among the Separately Owned Tracts in the Unit Area in accordance with said Plan of Unitization; and

WHEREAS, Lessee is the owner of all or a part of the oil and gas lease-hold interest in such Separately Owned Tract described in Exhibit "A" hereto attached and hereby made part hereof and as such is entitled to receive in kind or dispose of all or a part of the Unit Production allocated to each such Tract, the interest of the Lessee in each such Tract and the percentage of the Unit Production allocated thereto which Lessee has the right to receive in kind or dispose of, being as shown in said Exhibit "A"; and

WHEREAS, Plant Owners will own and be entitled to dispose of a portion of the residue gas remaining from gas processed by Plant Owners; and

[7527]

WHEREAS, under date of July 5, 1945, Plant Owners entered into a contract with Cities Service Gas Company which, as amended by letters of agreement dated respectively May 24, 1946 and December 23, 1946, provides for the sale of residue gas, a true copy of said contract as amended being hereto attached, marked Exhibit "B" and hereby made part hereof, said contract as so amended being hereinafter referred to as the "Cities Service contract";

NOW, THEREFORE, in consideration of the mutual agreements hereinafter set forth, it is agreed by and between Lessee and Plant Owners, as follows:

1. As herein used:

   A. The term "available Unit residue gas" shall mean residue gas which remains from gas processed by plant owners and which is allocated as Unit Production in accordance with said Plan of Unitization and Exhibit "D" thereto attached.

   B. The term "plant residue gas" shall mean residue gas (other than available Unit residue gas) which remains from gas processed by Plant Owners, and which is available for sale by Plant Owners, within the limitations imposed by said Exhibit "D".

   C. The term "available residue gas" shall mean and include both available Unit residue gas and plant residue gas.

BLEED THROUGH

BLURRED COPY

D. The term "Lessee's residue gas" shall mean and include all available residue gas which is allocated in accordance with said Plan of Unitization to the Separately Owned Tract(s) described in said Exhibit "A" and which Lessee has the right to receive in kind or dispose of on the basis of the percentage interests set forth in said Exhibit "A" with respect to said Separately Owned Tract(s).

E. The term "delivery capacity" shall mean the daily capacity to deliver dehydrated residue gas at a pressure of five hundred (500) pounds per square inch gauge of the plant facilities specified in Exhibit "D" attached to said Plan of Unitization, to be provided by Plant Owners, plus the daily capacity of any additions made thereto by Plant Owners (other than additions made by Plant Owners for the purpose of delivering Plant Residue Gas), but minus the daily quantity of residue gas taken from Plant owners by said Unit for gas injection purposes at a pressure of five hundred (500) pounds per square inch gauge.

[7528]

F. The term "Lessee's share of the delivery capacity" shall mean that proportion of the delivery capactiy which is equal to the proportion borne by the daily quantity of Lessee's residue gas to the daily quantity of available residue gas, as applied to a particular time.

G. A "cubic foot of residue gas" shall be that quantity of residue gas which occupies one cubic foot of space at an absolute pressure of sixteen and four tenths (16.4) pounds per square inch and

at a temperature of 60° Fahrenheit, without correction for deviation from Boyle's Law.

2. Plant Owners shall deliver Lessee's residue gas, dehydrated and at a pressure of five hundred (500) pounds per square inch gauge as specified in the Cities Service contract, to such purchaser or purchasers as may be designated by Lessee; provided, however, that the daily quantity of Lessee's residue gas so delivered shall not exceed either (a) Lessee's share of the delivery capacity at such time, or (b) the daily quantity of Lessee's residue gas deliverable at such time to a purchaser or purchasers designated by Lessee.

3. For the dehydration and delivery of Lessee's residue gas as above provided, Lessee agrees to pay to Plant Owners compensation at the rate of two and one-half cents (2½¢) per thousand cubic feet of Lessee's residue gas delivered by Plant Owners at a pressure of five hundred (500) pounds per square inch gauge. However, said rate of compensation is based on the annual average of wholesale prices for all commodities as shown by The Annual Index of Wholesale Prices for all Commodities as published by the United States Department of Labor for the year 1944, said Index as now published being based on the annual average for the year 1926 as one hundred percent (100%) and each "point" being one percent of said annual average for the year 1926. Therefore, if the annual average of said wholesale prices as shown in said Index as published by said Department of Labor for the year 1946 or any subsequent calendar year should be more than twenty (20) points above or below

BLEED THROUGH

BLURRED COPY

the annual average for the year 1944 as shown in said Index as published for that year, then said rate of compensation for delivery of Lessee's residue gas, as above provided, during the twelve (12)

[7529]

months next succeeding the date of publication of the annual Index showing such higher or lower average, shall be increased or decreased, as the case may be, in proportion to the increase or decrease of such annual average above or below the annual average as published in said annual Index for the year 1944.

4. Within twenty-five (25) days after the end of each month, Plant Owners shall submit to Lessee a statement showing the quantity of Lessee's residue gas delivered during such month and the amount owing by Lessee for the quantity of Lessee's residue gas delivered by Plant Owners at a pressure of five hundred (500) pounds per square inch gauge and dehydrated as required by the Cities Service contract, which amount shall be paid by Lessee within ten (10) days after receipt of such statement, unless otherwise paid as hereinafter provided.

5. During any time when the daily quantity of Lessee's residue gas exceeds Lessee's share of the delivery capacity, Plant Owners shall deliver to Lessee or to such purchaser or purchasers as may be designated by Lessee, such part or all of the daily quantity of Lessee's residue gas in excess of Lessee's share of the delivery capacity as Lessee may from time to time specify in writing to Plant Owners, provided

Lessee or the purchaser or purchasers designated by Lessee make all necessary arrangements for the receipt and measurement thereof at or in the immediate vicinity of Plant Owners' processing plant, delivery thereof to be made by Plant Owners without charge at the normal operating pressure of Plant Owners' low pressure processing facilities and without dehydration.

6. During the life of the Cities Service contract, Plant Owners shall deliver Lessee's residue gas to Cities Service Gas Company, its successors or assigns, in accordance with said contract, and Lessee hereby designates said company, its successors or assigns, as the purchaser of Lessee's residue gas, upon and subject to the following provisions:

[7530]

A. During any time when the daily quantity of residue gas being taken under the Cities Service contract is less than the daily quantity of available residue gas deliverable thereunder, the residue gas being taken under said contract shall be apportioned between Lessee's residue gas and other available residue gas in the proportion that the daily quantity of Lessee's residue gas bears to the daily quantity of all available residue gas deliverable under said contract, it being intended that Lessee's residue gas shall be delivered under said contract ratably with all other available residue gas deliverable thereunder.

B. Plant Owners shall collect and receive, for the account of Lessee, the purchase price payable under the Cities Service contract for the quantity of Lessee's residue gas delivered under said Con-

BLEED THROUGH

BLURRED COPY

tract in each month. Out of the amount so collected by Plant Owners in respect of each month, Plant Owners shall retain the compensation payable by Lessee in respect to the quantity of Lessee's residue gas delivered during such month under said contract, and the balance of the amount collected shall be paid by Plant Owners to Lessee.

C. Any optional right reserved or granted to Plant Owners in the Cities Service contract shall be exercised only with the written consent of the owners of at least fifty-one percent (51%) of the available residue gas then being delivered under said contract. If and whenever Plant Owners receive written request to exercise any such optional right, signed by the owners of fifty-one percent (51%) or more of the available residue gas then being delivered under said contract, Plant Owners shall exercise such right in accordance with the terms of said contract. Plant Owners, as the owners of a portion of the available residue gas deliverable under said contract, shall have the right to join in any such consent or request.

7. If and whenever a market for available residue gas not deliverable under the Cities Service contract is obtained either by Lessees or by Plant Owners, the party obtaining such market shall give the other party written notice thereof, stating the name of the purchaser and the price and terms and conditions of purchase. For thirty (30) days after receipt of such notice, the party receiving the notice shall have the right, at its option, to share in the market so

obtained in the proportion that the daily quantity of available residue gas then saleable by such party in such market bears to the total daily quantity of available residue gas then saleable in such market, at the price and on the terms and conditions stated in such notice, such option to be exercisable only by written notice

[7531]

of exercise given to the party obtaining the market within said thirty-day period. If at any time Lessee gives Plant Owners written notice, as above provided, with respect to a market obtained by Lessee, Plant Owners shall offer to all other owners of available residue gas who have entered into agreements with Plant Owners similar to this agreement, an opportunity to share in such market, in the same manner as if such market had been obtained by Plant Owners, but Plant Owners shall not be obligated to sell their available residue gas in such market otherwise than at their election.

8. Lessee hereby grants to Plant Owners a lien upon all of Lessee's residue gas which is deliverable by Plant Owners at a pressure of five hundred (500) pounds per square inch gauge, for the payment to Plant Owners of the compensation hereinabove provided to be paid by Lessee in respect to the quantity of Lessee's residue gas delivered at said pressure, and Lessee hereby authorizes Plant Owners to collect from any purchaser or purchasers of Lessee's residue gas delivered at said pressure, the compensation payable to Plant Owners in respect of the quantity of Lessee's residue gas delivered to such purchaser or purchasers.

BLEED THROUGH

BLURRED COPY

9. Adequate facilities for the receipt and measurement of the quantity of Lessee's residue gas delivered by Plant Owners to Lessee or a purchaser designated by Lessee shall be provided without expense to Plant Owners. Except with the written consent of Plant Owners, the quantity of Lessee's residue gas delivered by Plant Owners shall be measured by an orifice type meter of standard manufacture. Each such meter shall be tested at least once every three (3) months, without expense to Plant Owners, and such additional tests shall be made as may be requested by Plant Owners from time to time; the expense of each additional test shall be borne by Plant Owners unless the test discloses a meter inaccuracy in excess of two percent (2%), in which event the

[7532]

expense of the additional test shall be borne by Lessee or the purchaser from Lessee who installed the meter tested. Plant Owners shall be given at least ten (10) days written notice of each such test, and shall have the right to have a representative witness each test. If test of any meter discloses inaccuracy, the meter shall be adjusted so as to measure accurately the quantity of residue gas passing through it, but no retroactive adjustment shall be made unless the meter test discloses inaccuracy in excess of two percent (2%), in which event adjustment shall be made for the time during which the inaccuracy existed, if determinable or agreed upon, but otherwise for one-half (½) the time since the meter was last tested and found to be accurate.

10. Whenever Lessee's residue gas and available residue gas of any other owner or owners thereof is deliverable to the same purchaser, all of the available residue gas deliverable to such purchaser shall be delivered in a common stream and Lessee shall not be obligated to provide facilities for the receipt and measurement of Lessee's residue gas separately from other available residue gas being delivered to such purchaser.

11. Lessee covenants that Lessee has full right and authority to receive and authorize the delivery, as herein provided, of all of Lessee's residue gas, and that Lessee will indemnify Plant Owners against the lawful claims of any and all persons claiming any right or title to or interest in Lessee's residue gas.

12. During any time when the daily quantity of Lessee's residue gas is in excess of the quantity of Lessee's residue gas being taken by Lessee or a purchaser or purchasers designated by Lessee, Plant Owners shall have the right, as agent of and for the account of Lessee, to sell and deliver all or any part of such excess at the best price obtainable therefor at Plant Owners' plant and to collect and receive the purchase price payable for the quantity so sold and delivered. Plant Owners' compensation for the dehydration and delivery of the quantity of Lessee's residue gas so sold and delivered to be

[7533]

deducted from the amount collected and the balance thereof to be paid to Lessee. However, Plant Owners shall not be

BLEED THROUGH

BLURRED COPY

obligated so to sell and deliver any part of such excess quantity of Lessee's residue gas.

13. This agreement shall become effective upon the Effective Date of said Plan of Unitization and shall remain in force so long as gas from the Unit Area is processed by Plant Owners in accordance with Exhibit "D" attached to said Plan of Unitization.

14. Any notice herein provided or permitted to be given by either party to the other shall be deemed given if and when deposited in the United States mails, duly registered and properly addressed to the party to whom given. For the purpose of such notices, the proper address of Lessee shall be:

and the proper address of Plant Owners shall be: Phillips Petroleum Company, Attention Gasoline Department, Bartlesville, Oklahoma. However, either party may specify as its proper address any other post office address within the continental limits of the United States by giving to the other party at least fifteen (15) days' written notice thereof.

15. Neither party shall be under any liability to the other for any failure or delay in the performance of such party's obligations hereunder, to the extent that such failure or delay is caused by fire, action of the elements, strikes or other differences with workmen, restrictions or restraints imposed by law or by order or regulation of duly constituted public authority, whether federal, state or local, acts of civil or military authorities, acts of the public enemy, or any other cause reasonably beyond the control of the party in default, whether or not similar to the causes hereinabove

enumerated. However, if and whenever either party is prevented from performing or delayed in performance of such party's obligations hereunder by any such cause, such party shall proceed

[7534]

with due diligence to resume performance of its obligations hereunder, upon the removal of such cause, but nothing herein contained shall be deemed to obligate either party to settle a strike or other difference with workmen otherwise than on such terms as such party may deem proper in the sole discretion of such party.

16. This agreement shall be binding upon and inure to the benefit of the heirs, personal representatives, successors and assigns of Lessee, and the successors and assigns of Plant Owners. Transfer of all or any part of Lessee's interest shall not be binding on Plant Owners unless and until Plant Owners receive written notice thereof, accompanied by the original or a certified copy of the instrument of transfer. Lessee agrees not to make any assignment, mortgage or other transfer of all or any part of Lessee's oil and gas leasehold interest in the lands described in said Exhibit "A" without making the same expressly subject to the provisions of this agreement.

IN WITNESS WHEREOF, this agreement has been executed by the parties on the day and year first above written.

* * *

BLEED THROUGH

BLURRED COPY

[7545]

SOHIO PETROLEUM COMPANY

Midland Building
Cleveland 15, Ohio

October 1, 1947

Phillips Petroleum Company
(as Operator of the Edmond
Gasoline Plant and as Operator of
The Hunton Gasoline Plant),
Bartlesville, Oklahoma

Gentlemen: Attention: Mr. Legatski

Exhibit D to the Plan of Unitization of the West Edmond Hunton Lime Unit provides for the allocation as Unit production of the Unit's percentage of liquids or liquid products extracted or recovered from Unit gas processed in the Edmond Gasoline Plant owned by Phillips Petroleum Company and Continental Oil Company or in the Hunton Gasoline Plant now owned by Phillips Petroleum Company and others, and for the allocation as Unit production of residue gas remaining from such Unit gas after processing and not taken by the Unit for operating purposes. Article VII of said Plan of Unitization provides, among other things, that the Unit Operator is authorized to market and sell, or itself purchase, the portion of Unit production not taken in kind by a person entitled to take and receive the same in kind, the proceeds thereof to be paid by the Unit Operator to the person or persons for whose account the same is so marketed.

We are informed that various lessees of the West Edmond Hunton Lime Unit have heretofore entered into agreements with the owners of the Edmond Gasoline Plant for the sale

of liquids and residue gas which they respectively are entitled to receive in kind as Unit production, and that various lessees of the Unit have also entered into agreements with the owners of the Hunton Gasoline Plant for the sale of liquid products and residue gas which they respectively are entitled to receive in kind as Unit Production. However, we understand that a number of the lessees of the Unit have not entered into such agreements, and it is possible that some or all of these lessees will not arrange to receive in kind or otherwise dispose of the liquids or liquid products and residue gas which they respectively may be entitled to receive in kind as Unit production from time to time. Accordingly our company as Unit Operator of the West Edmond Hunton Lime Unit sumbits to you as Operator of the Edmond Gasoline Plant and as Operator of the Hunton Gasoline Plant, the following proposal:

Cleveland 15, Ohio L

[7546]

SOHIO PETROLEUM COMPANY

Phillips Petroleum Company
(as Operator of the Edmond
Gasoline Plant and as Operator of
The Hunton Gasoline Plant) Page 2

October 1, 1947

1. This proposal relates only to that portion of the liquids, liquid products and residue gas recovered or remaining from Unit gas processed in either of said plants which is allocated as Unit production in accordance with Exhibit D to said Plan of Unitization but which is not taken in kind or otherwise disposed of by the person or persons entitled to receive the same in kind under said Plan of Unitization.

BLEED THROUGH

BLURRED COPY

For convenience, that portion of such liquids, liquid products or residue gas which at any time is not taken in kind or otherwise disposed of by the person or persons entitled to receive the same in kind is hereinafter referred to as the "unclaimed portion" of such liquids, liquid products or residue gas.

2. Our company as Unit Operator of said Unit hereby sells to the owners of the Edmond Gasoline Plant, and said owners hereby agree to purchase, the unclaimed portion of liquids at any time allocable as Unit production out of the liquids recovered from Unit gas processed in said plant, such sale and purchase to be at the price and on the terms and conditions applicable at such time to the purchase by said plant owners of liquids allocable as Unit production to lessees of said Unit who are then selling their respective portions of said liquids to said plant owners under written agreements for the sale thereof.

3. Our company as Unit Operator of said Unit hereby sells to the owners of the Hunton Gasoline Plant, and said owners hereby agree to purchase, the unclaimed portion of liquid products at any time allocable as Unit production out of the liquid products recovered from Unit gas processed in said plant, such sale and purchase to be at the price and on the terms and conditions applicable at such time to the purchase by said plant owners of liquid products allocable as Unit production to lessees of said Unit who are then selling their respective portions of said liquid products to said plant owners under written agreements for the sale thereof.

4. The unclaimed portion of residue gas remaining at any time from Unit gas processed in the Edmond Gasoline Plant is hereby sold by us, and is to be delivered by you, to Cities Service Gas Company to the same extent, at the same price and on the same terms and conditions as residue gas

is, at the same time, being sold and delivered to Cities Service Gas Company pursuant to written agreements entered into with the owners of the Edmond Gasoline Plant by lessees of said Unit, with respect to the disposition of their respective portions of such residue gas. The unclaimed portion of residue gas remaining at any time from Unit gas processed in the Hunton Gasoline Plant is hereby sold by us, and is to be delivered by you, to Oklahoma Natural Gas Company, to the same extent, at the same price, and on the same terms and conditions as residue gas is, at the same time, being sold and delivered to Oklahoma Natural Gas Company pursuant to written agreements entered into with the owners of the Hunton Gasoline Plant by lessees of said Unit, with respect to the disposition of their respective portions of

such residue gas. Whenever all the residue gas allocable as Unit production from either plant is in excess of the quantity of residue gas then deliverable to Cities Service Gas Company or Oklahoma Natural Gas Company (as the case may be), the quantity of residue gas then deliverable to Cities Service Gas Company or Oklahoma Natural Gas Company (as the case may be) is to be apportioned ratably between the unclaimed portion of all such residue gas and the remaining portion of all such residue gas. The owners

BLEED THROUGH

BLURRED COPY

of the Edmond Gasoline Plant and the owners of the Hunton Gasoline Plant are respectively to be entitled to the same charges for dehydration and compression of unclaimed residue gas delivered to Cities Service Gas Company or Oklahoma Natural Gas Company (as the case may be) at any time, as those then applicable to other residue gas allocated as Unit production.

5. You are to pay direct to the persons entitled thereto the proceeds derived from the sale of the unclaimed portion of liquids, liquid products and residue gas allocable as Unit production from Unit gas processed in said plants, subject to the same deductions and charges as those applicable from time to time under written agreements entered into with the owners of said plants respectively by lessees of said Unit with respect to the sale of their respective portions of such liquid, liquid products and residue gas.

6. It is the intent of this proposal that the unclaimed portion of liquids or liquid products and residue gas allocable as Unit production in respect of Unit gas processed in each of said plants be sold or disposed of from time to time in the same manner, to the same extent and on the same terms and conditions as the portion of such liquids or liquid products and residue gas which, at the time of sale or disposition of such unclaimed portion, is covered by and subject to agreements entered into with the owners of such plant by lessees entitled to receive the same in kind.

To indicate your assent to the foregoing proposal, please sign the acceptance on the copy of this letter herewith enclosed and return it to us, whereupon this letter shall constitute the agreement between us on the matters above set forth, to remain in force unless and until terminated by either party by giving to the other party at least thirty (30) days' advance written notice of termination.

Very truly yours,

SOHIO PETROLEUM COMPANY
(as Unit Operator of the
West Edmond Hunton Lime Unit)

By s/s/ S. A. SWENSRUD
Vice- President

ACCEPTED this 1st day of October, 1947.

PHILLIPS PETROLEUM COMPANY
(as Operator of the Edmond Gasoline Plant and as Operator of the Hunton Gasoline Plant)

By /s/ F. E. RICE
Vice President

• • •

[7621]

AGREEMENT FOR AMENDMENT OF
EXHIBIT "D"
PLAN OF UNITIZATION
WEST EDMOND HUNTON LIME UNIT

This AGREEMENT made and entered into this 15 day of March, 1949 by the following parties:

West Edmond Hunton Lime Unit created pursuant to Order No. 21445 of the Corporation Commission of Oklahoma entered on the 30th day of July, 1948, said Unit being hereinafter referred to as the "Unit";

Phillips Petroleum Company and the Continental Oil Company, as the owners of the gas processing plant known as Edmond Gasoline Plant, located near the Unit area of the Unit, said Companies as such plant owners being hereinafter referred to as "Edmond Plant Owners"; and

BLEED THROUGH

BLURRED COPY

Phillips Petroleum Company, West Edmond Oil Company, The Continental Oil Company, Stanolind Oil and Gas Company, Mid-Continent Petroleum Corporation and Sohio Petroleum Company, as owners of the gas processing plant known as the Hunton Gasoline Plant, located within the Unit area of the Unit, said Companies as such plant owners being hereinafter referred to as the "Hunton Plant Owners"; said Hunton Gasoline Plant is the gas processing plant referred to as owned by Peppers Refining Company in Exhibit "D" to the Plan of Unitization of the West Edmond Hunton Lime Unit created pursuant to Ordér No. 20212 of the Corporation Commission of Oklahoma, the Hunton Plant Owners having succeeded to the rights and obligations of said Peppers Refining Company under said Exhibit "D"; and,

WITNESSETH THAT

WHEREAS, the Unit's Plan of Unitization as approved by the Corporation Commission of Oklahoma, incorporated as part thereof the Plan of Unitization of the West Edmond Lime Unit created pursuant to said Order No. 20212 of the Corporation Commission of Oklahoma,

[7622]

including Exhibit "D" thereto entitled "Processing and Compression of Gas," which Exhibit "D" is hereinafter referred to as the "Processing Exhibit".

WHEREAS, the Operating Committee of the Unit has deemed it advisable and necessary to modify and amend said Exhibit "D" to the extent and in the respects hereinafter set forth, in the interests of conservation and in order

to provide Unit residue gas for injection within the Unit area, in event the Operating Committee should authorize such gas injection; and

WHEREAS, the execution of this Agreement has been authorized by lessees of the Unit, having at least 66-2/3% of the total voting interest in the Unit:

NOW, THEREFORE, in consideration of the premises and of the undertakings of the parties hereto, respectively, as hereinafter set forth, it is agreed by and among the parties hereto as follows:

ARTICLE I — DEFINITIONS

1. All words and terms which are defined in said Processing Exhibit or in any other portion of the Unit's Plan of Unitization shall have the same meaning, as used in this agreement, as that ascribed thereto in said Processing Exhibit or in any other portion of said Plan of Unitization.

ARTICLE II — GAS GATHERING

2. The Edmond Plant Owners and the Hunton Plant Owners have heretofore entered into an agreement providing for the following, contingent upon the execution of this Agreement:

[7623]

(a) The consolidation of the existing Unit gas gathering facilities now owned by them respectively, for the purpose of increasing the efficiency of the two systems in the gathering of Unit gas.

BLEED THROUGH

BLURRED COPY

(b) The enlargement of existing lines for the gathering of Unit gas, so as to permit the gathering of increased quantities of Unit gas in certain portions of the Unit area.

(c) The construction and installation of new gathering lines and other facilities for the gathering of Unit gas from tank batteries in Townships 13 and 14 of the Unit area, not now connected to either of the existing gas gathering systems.

Reference is made to the following Exhibits which are hereto attached and hereby made a part hereof:

Exhibit "A" which shows the location and sizes of the existing Unit gas gathering lines.

Exhibit "B" which shows the location and sizes of the Unit gas gathering lines as they will exist after consolidation, enlargement and extension, and also shows the location of a proposed compressor plant to permit the gathering of increased volumes of Unit gas; the proposed gas gathering system as shown on said Exhibit "B" will connect with every tank battery now located in Townships 13 and 14 in the Unit area.

Exhibit "C" which shows the estimated production of Unit gas from various portions of the Unit area up to January 1, 1955, both under normal depletion and under an injection program of 36 million cubic feet of gas per day in the Chimney Hill section of the Unit area.

Exhibit "D" which shows the estimated pressures at which gas will be produced from various portions of the Unit area up to January 1, 1955, both under normal depletion and under an in-

jection program of 36 million cubic feet of gas per day in the Chimney Hill section of the Unit area.

The tank batteries designated on Exhibit "B" in Townships 13 and 14 are hereby designated by the Unit as the central tank batteries from which the Edmond Plant Owners and the Hunton Plant Owners are to gather Unit gas.

The proposed gas gathering system as shown on said Exhibit "B" has been designed to provide capacity adequate for the gathering of the estimated quantities of Unit gas shown on said Exhibit "C" when produced at the pressures shown on said Exhibit "D".

3. Edmond Plant Owners and Hunton Plant Owners agree to perform as soon as reasonably possible the preliminary engineering for, and to commence as soon as reasonably possible and prosecute to completion with reasonable diligence the construction and installation of, the enlarged and extended facilities for gathering Unit gas as shown on Exhibit "B" (including the above-mentioned compressor plant with 1800 horsepower) to the end that the system and facilities for the gathering of Unit gas as shown on said Exhibit "B" may be completed and ready for operation by approximately November 30, 1949. However, if the use of any portion of the gathering facilities shown on said Exhibit "B" will not initially be required for the gathering of Unit gas on the basis of the estimates shown in Exhibits "C" and "D", the installation thereof may be postponed until use thereof is required, at which time Plant Owners will install the same at their sole cost. After completion of the enlarged

BLEED THROUGH

BLURRED COPY

and extended gas gathering facilities, the Edmond Plant Owners and the Hunton Plant Owners will cooperate with the Unit Operator in the operation of

[7625]

the entire gas gathering system in such manner as to gather all of the Unit gas that may be produced in Townships 13 and 14 of the Unit area, within the limits of the capacity of the gas gathering system when operated efficiently and in conformity with customary practices and within the limits of the utilization capacities of the Edmond Gasoline Plant and the Hunton Gasoline Plant as defined in Paragraph 9, hereunder. From time to time as and when operating conditions permit, deviations from said Exhibit "B" and substitutions in and removals of portions of the gathering facilities as shown on said Exhibit "B" may be made, with the written approval of Unit Operator.

ARTICLE III — HUNTON GASOLINE PLANT

4. The Hunton Plant Owners agree to make such alterations in and additions to the Hunton Gasoline Plant as may be necessary to convert said plant from low pressure operation to conventional high pressure operation having a capacity to process at least 60 million cubic feet of gas daily and to deliver approximately 45 million cubic feet of residue gas daily, dehydrated and at a pressure of 500# per square inch gauge when the pressures at the central tank batteries designated on said Exhibit "B" as the central tank batteries from which said plant is to receive Unit gas are equal to the pressures indicated on Exhibit "D" for said central tank batteries

for the year 1949, except that the Unit is to provide the compression and dehydration facilities hereinafter mentioned. Although alterations and additions to the Hunton Gasoline Plant will be designed by Hunton Plant Owners to recover from the gas processed approximately 35% of the propane, 80% of the butanes, and 99% of the pentanes and heavier content, it is clearly understood that such

[7626]

percentages of recovery are not assumed as an obligation by Hunton Plant Owners. With the completion of the alterations and additions to the Hunton Gasoline Plant as here outlined, it is agreed that the Hunton Plant owners shall never be required to enlarge the capacity of the plant except as provided in Section 6 of Article II of Part III of the Processing Exhibit. The Hunton Plant Owners agree to proceed forthwith with the necessary preliminary engineering for said alterations and additions and to commence actual construction thereof as soon as possible and to prosecute such construction with reasonable diligence so that the same may be completed by approximately October 1, 1949.

5. The Unit, in connection with its Pilot Gas Injection Program, has heretofore installed in the Hunton Gasoline Plant, one 600 horsepower compressor, which is owned by the Unit. The Hunton Plant Owners agree to install at the Hunton Gasoline Plant, two additional 600 horsepower compressors for the compression of gas to 500# per square inch gauge, to convert the presently installed compressor for the compression of gas to 500# per square inch gauge, and to install dehydration and other appurtenant facilities

BLEED THROUGH

BLURRED COPY

for the three compressors but the Unit agrees to reimburse the Hunton Plant Owners for the actual cost thereof. Such actual cost will include the cost of foundations, construction of necessary building or building extension, cooling tower or cooling tower extension, cooling coils for both water and gas, as well as the acquisition cost and installation cost of the compressors and their accessories and appurtenances, and all other costs actually incurred by the Hunton Plant Owners which are a proper direct charge to the installation of the two new compressors and the conversion of the presently installed.

[7627]

compressor in accordance with customary accounting practices. It is anticipated that the installation of the two new compressors and the conversion of the existing compressor will be performed by the same contractor under the same construction contract as the alterations and additions above provided to be made to the Hunton Gasoline Plant. The Hunton Plant Owners will cause such construction contractor to keep a separate record of charges in respect of the installation of the two new compressors, the conversion of the presently installed compressor and the installation of appurtenances and accessories thereto, and to submit to Hunton Plant Owners, after the end of each month, an itemized statement of such charges for the month. After the end of each month, Hunton Plant Owners will submit to the Unit Operator a statement of actual costs incurred by them during the month in the installation of the two new compressors and the conversion of the exisiting compres-

sor, with their appurtenances and accessories properly itemized, and the amount thereof will be reimbursed by the Unit, through the Unit operator, to the Hunton Plant Owners, within fifteen (15) days after receipt of the statement, the amount paid by the Unit Operator to be charged as unit Expense in accordance with the Unit's Plan of Unitization. The Unit shall have the right, through its authorized representatives, to examine the books and records of the construction contractor and the books and records of the Hunton Plant Owners relating to the installation of the two new compressors and the conversion of the existing compressor, for the purpose of determining the correctness of the statements submitted by the Hunton Plant Owners. Payment of any such statement shall be without prejudice to the right of the Unit to question

[7628]

the correctness thereof, provided written objection to the statement is made on behalf of the Unit within six months after completion of the installation and conversion of compressors and the installation of appurtenances and accessories thereto.

6. The 600 horsepower compressor heretofore installed by the Unit in the Hunton Gasoline Plant, and all alterations made thereto in the conversion thereof as above provided, and the two additional 600 horsepower compressors for which the Unit is to reimburse the Hunton Plant Owners, with all appurtenances and accessories to the three compressors shall be and remain the property of the Unit, but the Hunton Plant Owners shall have the right to use

BLEED THROUGH

BLURRED COPY

and operate all three of said compressors and their appurtenant facilities and accessories, in connection with the operation of the Hunton Gasoline Plant, in accordance with the following provisions:

(a) The Hunton Plant Owners will operate the same and keep them in repair, furnishing all necessary labor, supplies, materials, utility services, repair and replacement parts and the like.

(b) Through the Unit Operator, the Unit will pay to the Hunton Plant Owners, as compensation for the operation of said compressors, at the rate of $18.00 per rated horsepower per year, compensation at said rate to cover all operating labor, utility services, operating supplies, supervision and other operating expenses. After the end of each month, Hunton Plant Owners will invoice the Unit Operator for the amount of said operating charge for the month, computed on the basis of the rated horsepower in operation during the month; however, whenever a compressor is out of service for more than two weeks during such month, no operating charge will be made for the period it is out of service. In addition, the Unit through Unit Operator, will reimburse the

[7629]

Hunton Plant Owners for the actual cost of repair and maintenance work on said compressors and their appurtenances and accessories, such actual cost to include cost of labor, materials, parts and replacements furnished in the repair and maintenance and all other expenses actually incurred by Hunton Plant Owners which are a proper direct charge to the repair and maintenance work in conformity with customary ac-

counting practices; after the end of each month during which Hunton Plant Owners perform any such repair or maintenance work, they will submit to the Unit Operator an itemized statement of the actual cost of the work performed during the month and the amount thereof will be paid by the Unit Operator within the fifteen (15) days after receipt of such statement. All amounts paid by the Unit Operator to Hunton Plant Owners as above provided will be considered Unit Expense under the Unit's Plan of Unitization.

(c) No charge will be made by the Hunton Plant Owners for the compression and dehydration of Unit residue gas which is compressed and dehydrated by means of the facilities owned by the Unit other than the operating charge and the reimbursement for actual cost of maintenance and repair above provided for. For the purpose of determining the quantity of Unit residue gas compressed and dehydrated by means of the facilities owned by the Unit, the total quantity of compressed and dehydrated Unit residue gas delivered by the Hunton Plant Owners during a month will be allocated between the compression and dehydration facilities owned by the Unit and the compression and dehydration facilities owned by the Hunton Plant Owners on the basis of the relative rated horsepower of the Unit facilities and the Hunton Plant Owners facilities in operation during the month. During any period when the Hunton Plant Owners are delivering compressed and dehydrated Unit residue gas to the Unit for gas injection purposes, the quantity of compressed and dehydrated Unit residue gas allocated to the Hunton Plant Owners facilities shall be deemed to include Unit residue gas delivered for such injection purposes, for the purpose of computing the compression and dehydration charges payable

BLEED THROUGH

BLURRED COPY

in respect of Unit residue gas compressed and dehydrated by means of facilities owned by the Hunton Plant Owners.

(d) The Unit assumes all risks of loss or damage to the compression and dehydration facilities owned by the Unit which may be caused by fire, explosion, action of the elements, or other casualties, and all such loss or damage will be borne by the Unit. Hunton Plant Owners will operate the compression and dehydration facilities owned by the Unit with the same degree of care and with the same precautions as in the operation of their own compression and dehydration facilities and the Hunton Plant Owners shall not be held liable for loss or damage of any kind occurring to the Unit's facilities from any cause other than failure of the Hunton Plant Owners to use the same degree of care and the same precautions in the operation of the Unit's facilities as those used in the operation of the Hunton Plant Owners facilities.

(e) Whenever the quantity of Unit gas deliverable to the Hunton Plant Owners for processing declines to such extent that use of a compressor owned by the Unit may be permanently discontinued, the Unit will have the right to remove for salvage, or other disposition, the compressor, use of which is no longer required, together with its appurtenances and accessories, excepting, however, appurtenances and accessories required in the operation of other compression facilities. Whenever the use of a 500# service compressor, or compressors, installed at the Hunton Gasoline Plant may temporarily be dispensed with, one or more of the Unit's compressors will first be shut down, before any of the

compressors owned by the Hunton Plant Owners is shut down.

(f) Hunton Plant Owners shall be responsible for and shall indemnify the Unit against, any and all claims, demands and causes of action of any nature for injury to, or death of, persons or for loss of or damage to property occasioned by the construction, installation, operation, maintenance, or repair of the compression and dehydration facilities owned by the Unit. Any and all employees of the Hunton Plant Owners who may

[7631]

be engaged in the construction, installation, operation, maintenance, or repair of the compression and dehydration facilities owned by the Unit shall be deemed the employees of the Hunton Plant Owners, who will be obligated to comply with the Workmen's Compensation Laws of Oklahoma, Federal and State Wage and Hour Laws and Federal and State Social Security Laws, and all valid regulations issued under any such laws, insofar as such laws or regulations relate to said employees.

ARTICLE IV — GAS INJECTION

7. If the Unit, in accordance with its Plan of Unitization, should adopt a program for the injection of gas into the Unit area, all of the Unit residue gas required for such gas injection purposes shall be delivered to the Unit by the Hunton Plant Owners, at a pressure of 500# per square inch gauge, at or in the immediate vicinity of the Hunton Gasoline Plant, up to, but not in excess of the residue pro-

BLEED THROUGH

BLURRED COPY

duced from the quantity of Unit gas available at the plant for processing, the capacity of the plant processing equipment or the capacity of the compression facilities, including those of the Unit, as well as those of the Hunton Plant Owners. The Unit shall not be obligated to take from the Edmond Plant Owners any of the Unit residue gas required for such gas injection purposes, but the Unit will have the right to require the Edmond Plant Owners to deliver Unit residue gas for such gas injection purposes whenever the Unit residue gas deliverable by the Hunton Plant Owners is insufficient.

ARTICLE V — PRODUCTION, PROCESSING AND GATHERING OF UNIT GAS

8. After consolidation, extension and enlargement of the gas gathering systems of the Edmond Plant Owners and the Hunton Plant Owners, respectively, have been completed in accordance with Section 3 of Article

II of this Agreement, both the Edmond Plant Owners and the Hunton Plant Owners will have complied with all of their obligations under the Processing Exhibit of the Plan of Unitization, as well as under this Agreement, concerning the installation of facilities for the gathering of Unit gas. Neither the Edmond Plant Owners, nor the Hunton Plant Owners will be obligated at any time to gather or process gas produced in Township 12 or in Township 15 of the Unit area, and such Unit gas as may hereafter be produced in said Township 12 or in said Township 15 shall not be

subject in any manner to the provisions of the Processing Exhibit or to the provisions of this Agreement.

9. After the consolidation, enlargement and extension of said gas gathering systems in accordance with Article II of this Agreement have been completed, the quantity of Unit gas produced at any time from Townships 13 and 14 of the Unit area will not exceed 106% of the combined utilization capacities of the Edmond Gasoline Plant and the Hunton Gasoline Plant. For this purpose the "Utilization Capacity" of each said Gasoline Plants will be that quantity of Unit gas which, after being gathered and processed in the Plant, will yield a quantity of Unit residue gas equal to the sum of (a) the quantity of Unit residue gas from such Plant then being taken by the lessees or other persons entitled to receive the same, or by purchasers from such lessees or other persons and, (b) the quantity of Unit residue gas from such Plant then being taken by the Unit for use in its field operations and (c) the quantity of Unit residue gas from such Plant then being delivered to the Unit for gas injection purposes.

There shall be delivered to Edmond Gasoline Plant for pro-

[7633]

cessing, in each month, a quantity of Unit gas equal to the lesser of (a) the Utilization Capacity of the plant facilities during such month, or (b) two-thirds (2/3) of the Unit gas produced and saved during such month. However, if at any time the Utilization Capacity of the plant facilities should exceed two-thirds (2/3) of the Unit gas then being

BLEED THROUGH

BLURRED COPY

produced and saved, and if the Utilization Capacity of Hunton Gasoline Plant be less than one-third (1/3) of the Unit gas then being produced and saved, then, during the time such condition continues, there shall be delivered to Edmond Gasoline Plant for processing a daily quantity of Unit gas equal to the lesser of (a) the Utilization Capacity of the plant facilities, or (b) the total quantity of Unit gas then being produced and saved, minus the Utilization Capacity of Hunton Gasoline Plant.

There shall be delivered to Hunton Gasoline Plant for processing, in each month, a quantity of Unit gas equal to the lesser of (a) the Utilization Capacity of the plant facilities during such month, or (b) one-third (1/3) of the Unit gas produced and saved during such month. However, if at any time the Utilization Capacity of the plant facilities should exceed one-third (1/3) of the Unit gas then being produced and saved, and if the Utilization Capacity of Edmond Gasoline Plant be less than two-thirds (2/3) of the Unit gas then being produced and saved, then, during the time such condition continues, there shall be delivered to Hunton Gasoline Plant for processing a daily quantity of Unit gas equal to the lesser of (a) the Utilization Capacity of the Plant facilities, or (b) the total quantity of Unit gas then being produced and saved, minus the utilization capacity of Edmond Gasoline Plant.

10. If the Operating Committee of the Unit should decide, at

[7634]

any time either:

(a) to relocate any tank battery, or tank batteries, now installed within Township 13 or Township 14 of the Unit area, shown on said Exhibit "B"; or

(b) to produce from any portion of the Unit area within Township 13 or Township 14, a quantity of Unit gas substantially in excess of the capacity of the gas gathering facilities shown on said Exhibit "B" for service to such portion of the Unit area,

the Operating Committee shall cause written notice of such decision to be given to the Edmond Plant Owners and to the Hunton Plant Owners. If the Operating Committee decision is to relocate a tank battery, or tank batteries, the notice will identify the battery, or batteries, to be relocated and will show the new location or locations thereof; if the decision is to produce a quantity of Unit gas substantially in excess of the capacity of the gas gathering facilities then installed, the notice shall show the portion of the Unit area from which the excess quantity is to be produced and will state the estimated quantity to be produced therefrom and the pressures at which it will be produced, such estimated quantity and pressure to be shown separately for each year of the next five years. As soon as reasonably possible after receipt of any such notice, the Edmond Plant Owners and the Hunton Plant Owners will be obligated to make such relocation and/or enlargements in the gas gathering facilities as may be necessary to gather Unit gas from the relocated tank battery, or tank batteries, or to gather the excess quantity of Unit gas shown in the notice, as the case may be. However, the intangible cost of relocating the gas gathering facilities, or the intangible cost of enlarging the gas gathering facilities, as the case may be, pursuant to

BLEED THROUGH

BLURRED COPY

the notice caused to be given by the Operating Committee, will be borne by the Unit and reimbursed to the Edmond Plant Owners and the Hunton Plant Owners by the Unit Operator, who will charge the amount thereof as Unit Expense.

11. Promptly after the execution of this Agreement, the Edmond Plant Owners and the Hunton Plant Owners will proceed with such installations in their respective Gasoline Plants as may be necessary to eliminate the use of Unit residue gas from their respective Plants in the operation of their respective Plants for any purpose other than use as fuel, it being intended that the Edmond Plant Owners, in respect of the Edmond Gasoline Plant, and the Hunton Plant Owners, in respect of the Hunton Plant shall be permitted to use such quantity of residue gas from Unit gas as may reasonably be required for use as fuel in Plant operations, but shall not be entitled to use Unit residue gas for any other purpose in Plant Operations.

ARTICLE VI — GENERAL PROVISION

12. The Processing Exhibit, as amended by this Agreement, shall remain in force according to its terms in all respects, except as otherwise provided in this Agreement, but any and all provisions of the Processing Exhibit which are contrary to, or inconsistent with, any provision of this Agreement shall be deemed superseded by the applicable provision, or provisions, of this Agreement.

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto through their respective officers on the day and year first above written.

* * *

[7691]

GAS PURCHASE CONTRACT

THIS CONTRACT made and entered into this 12th day of September, 1949, by and between CITIES SERVICE GAS COMPANY, a Delaware corporation, having offices in Oklahoma City, Oklahoma, hereinafter called "Buyer", and Phillips Petroleum Company, a Delaware corporation, having offices in Bartlesville, Oklahoma, hereinafter called "Seller", WITNESSETH, That:

WHEREAS, Seller represents that Seller is a lessee of the West Edmond Hunton Lime Unit created pursuant to Order No. 22,247 of the Corporation Commission of Oklahoma, and that Seller, under the Plan of Unitization of said Unit, is entitled to receive in kind and sell or otherwise

$$\frac{63673174}{100000000}$$

dispose of Nineteen and per cent (19.63673174%) of any and all gas and residue gas provided in the Plan of Unitization of said Unit to be delivered in kind as Unit Production; and

WHEREAS, Buyer is engaged in the business of selling natural gas at wholesale to chosen customers and to distributors thereof and is desirous of obtaining an additional supply of merchantable gas to meet its requirements:

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, Seller and Buyer have agreed with each other as follows:

* * *

BLEED THROUGH

BLURRED COPY

[7692]

II.

SALE AND DELIVERY

2.1 Subject to the terms and conditions hereof, Seller agrees to sell and deliver, or cause to be delivered, to Buyer, and Buyer agrees to purchase and receive, commencing with the date of first delivery hereinafter specified and continuing during the life of this contract, Seller's Proportionate Share of the Contract Gas, provided, however, that:

A. Buyer shall not be obligated to purchase, during any fiscal month, a quantity of Contract Gas exceeding in the aggregate an average of 25,000,000 cubic feet daily, averaged over the fiscal month, said quantity being hereinafter referred to as the "minimum quantity", however, Buyer shall not be obligated to purchase and receive at any time more than

[7693]

fifteen million cubic feet of North Residue Gas daily or more than twenty million cubic feet of Hunton Residue Gas daily.

B. In the event Seller and other Unit Lessees (for any reason whatsoever other than force majeure, as hereinafter defined, or Buyer's failure to take Contract Gas available for delivery to it) should fail to deliver the minimum quantity above specified or any lesser minimum quantity then applicable under this contract, during each fiscal month for a period of three consecutive fiscal months, the minimum quantity applicable hereunder for each succeeding fiscal month shall be a

quantity equivalent to an average daily quantity during the month equal to the average daily quantity delivered by the Seller and other Unit Lessees during such three consecutive fiscal months, unless and until a low minimum quantity is established.

C. If delivery of gas hereunder commences on any date other than the first day of a fiscal month, or if this contract terminates on any date other than the last day of a fiscal month, the minimum quantity applicable for the fractional fiscal month in question shall be prorated on the basis of the minimum quantity then applicable for a full fiscal month.

2.2 During the life of this contract, after the date of first delivery herinafter specified, Buyer shall have the right, at its option, to purchase and receive, on the terms and conditions herein set forth, Seller's Proportionate Share of any and all Contract Gas in excess of the minimum quantity above specified to be purchased and received by Buyer, during any time or times when the quantity of Contract Gas available for delivery to the Buyer and deliverable by means of then installed facilities, is in excess of the minimum quantity then applicable hereunder.

2.3 To the extent that Seller may be able to control, or participate in the control of, the rates of delivery of the Contract Gas, Seller agrees to deliver or cause to be delivered to Buyer the maximum quantities of Contract Gas reasonably possible, whenever necessary to assist the Buyer in meeting the fluctuating requirements of its business.

BLEED THROUGH

BLURRED COPY

[7694]

2.4 The point of delivery for Hunton Residue Gas deliverable hereunder shall be the North fence line of the Hunton Gasoline Plant site, and the point of delivery for North Residue Gas deliverable hereunder shall be the East fence line of the North Plant site.

* * *

[7798]

Exhibit No. 53

[*Note: This exhibit was rejected by the Examiner at record 5765 and was not received in evidence. An offer of proof was made on page 5765 of the record by the State of Wisconsin and the Public Service Commission of Wisconsin.*]

Form No. 40 100M 100P 8-44 A 22664

NOTEGRAM

Memo To	Allen B. Hiatt	Date 7/7	1948
From	R. B. Stewart	To Return Cross Out Your Name And The Word "From"	

We get the following results comparing the map in the M.-W. contract with the new photostat.

Net add'l acreage omitted from original	28,000*
Add'l acreage acquired from C. S. oil	14,000
Add'l acreage (misc.) acquired since contract	4,900
Total add'l acreage represented by photostat	46,900

*This net acreage was included in revised maps prepared 8-21-46 but to my knowledge the M-W people never received a copy of such revision hence their count checks the above count approximately. See Mr. Bunn & Kirk re. this.

Put It In Writing Written Messages Save Time Prevent 5-Annoying Interruptions And Errors

[7799]

ADD'L ACREAGE SHOWN BY NEW MICH-WISC EXHIBIT "A"

Net Acreage Omitted from Original	27,422	
Acreage Acquired from C. S. Oil	14,578	gross
Misc Acreage Acquired Since Contract	4,860	
Net Add'l Acreage Represented by new Exhibit	46,860	gross
We are promising add'l from PEPL. block	7,000	approx.
Probable total addition to original Exhibit "A"	53,860	

320	28,000
3	14,000
960	42,000
640	2,820
1,600	44,820
480	7,000
2,080	51,820
4,900	
2,080	
2,820	

BLEED THROUGH

BLURRED COPY

COPY BOUND VERTICALLY

Exhibit No. 54

[Note: Cover page and title page omitted]

G-1148—PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
SUMMARY
1950

Particulars	Volume Mcf @ 14.65 p.s.i.a.				AMOUNT		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per MCF Total Sales	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Gas Sales from Oil Leases	9,256,179	29,754,419	39,010,598	.0347	374,480.02	979,741.57	1,354,221.59
Gas Sales from Casinghead Royalties	7,846	341,049	348,895	.0394	374.93	13,379.37	13,754.30
Total	9,264,025	30,095,468	39,359,493	.0348	374,854.95	993,120.94	1,367,975.89
Gas Sales from Dry Gas Royalties	569,243	1,287,019	1,856,262	.0435	15,303.79	65,423.01	80,726.80
Gas Sales from Dry Gas Leases	17,788,241	4,252,033	22,040,274	.0427	716,837.58	225,272.01	942,109.59
Gas Sales from Cycling Operations	1,461,385	15,117	1,476,502	.0565	81,916.62	1,522.01	83,438.63
Gas Sales from Distributing Systems	92,772	55,020,185	55,112,957	.0528	7,492.12	2,903,054.78	2,910,546.90
Gas Sales by Independent Natural Gas Co.	2,714,407	....	2,714,407	.0490	133,078.69	....	133,078.69
Sales of Residue Gas	292,610,915	84,528,586	377,139,501	.0538	16,033,809.55	4,240,645.81	20,274,455.36
Total Outside Sales	324,500,988	175,198,408	499,699,396	.0516	17,363,293.30	8,429,038.56	25,792,331.86

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
SALES OF RESIDUE GAS
YEAR 1950

[7803]

Sheet 1

7803

1054

Gasoline Plant	Volume in Mcf @ 14.65 p.s.i.a.				Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Canadian		3,835,336	3,835,336	$ .0501		$ 192,059.31	$ 192,059.31
Crane							
El Paso Natural Gas Company	2,729,753		2,729,753	.0469	128,022.34		128,022.34
Other		28,872	28,872	.0434		1,253.14	1,253.14
Total Crane	2,729,753	28,872	2,758,625	.0469	128,022.34	1,253.14	129,275.48
Edmond (50% Interest)							
Cities Service Gas Company	16,735,038		16,735,038	.0553	925,900.88		925,900.88
Other		14,860	14,860	.0454		674.83	674.83
Total Edmond	16,735,038	14,860	16,749,898	.0553	925,900.88	674.83	926,575.71
Eunice							
El Paso Natural Gas Company	28,176,810		28,176,810	.0381	1,073,517.46		1,073,517.46
Southern California Gas Company					25,509.89		25,509.89
Southern Counties Gas Co. of California					8,368.83		8,368.83
Other		11,663,129	11,663,129	.0497		579,750.70	579,750.70
Total Eunice	28,176,810	11,663,129	39,839,939	.0423	1,107,396.18	579,750.70	1,687,146.88
Fullerton (50% Interest)							
El Paso Natural Gas Company	7,171,117		7,171,117	.0407	291,832.93		291,832.93
Southern California Gas Company					11,741.63		11,741.63
Southern Counties Gas Co. of California					3,876.47		3,876.47
Other		101,382	101,382	.0406		4,119.69	4,119.69
Total Fullerton	7,171,117	101,382	7,272,499	.0428	307,451.03	4,119.69	311,570.72
Goldsmith							
El Paso Natural Gas Company	26,289,471		26,289,471	.0492	1,293,574.13		1,293,574.13
Southern California Gas Company					22.24		22.24
Southern Counties Gas Co. of California					66.72		66.72
Other		202,592	202,592	.0740		14,982.64	14,982.64
Total Goldsmith	26,289,471	202,592	26,492,063	$ .0494	$ 1,293,663.09	$ 14,982.64	$ 1,308,645.73

BLEED THROUGH

BLURRED COPY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
SALES OF RESIDUE GAS
YEAR 1950

[7804]
Sheet 2

Gasoline Plant	Volume in Mcf @ 14.65 p.s.i.a.			Price Per Mcf	Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales		Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Hansford	30,924,433		30,924,433	$ .0403	$ 1,246,785.64	$	$ 1,246,785.64
Panhandle Eastern Pipe Line Company		17,847	17,847	.0600		1,070.82	1,070.82
Other							
Total Hansford	30,924,433	17,847	30,942,280	.0403	1,246,785.64	1,070.82	1,247,856.46
Hobbs	2,564,868		2,564,868	.0380	97,375.41		97,375.41
El Paso Natural Gas Company		5,872	5,872	.0747		438.79	438.79
Other							
Total Hobbs	2,564,868	5,872	2,570,740	.0380	97,375.41	438.79	97,814.20
Hunton Station (37.60116160% Int.)	1,232,060		1,232,060	.0682	83,989.27		83,989.27
Cities Service Gas Company		4,398 084	4,398,084	.0530		233,151.76	233,151.76
Other							
Total Hunton Station	1,232,060	4,398,084	5,630,144	.0563	83,989.27	233,151.76	317,141.03
Judkins		3,000,296	3,000,296	.0462		138,512.34	138,512.34
Keystone (9.4486% Int.)	1,173,321		1,173,321	.0563	66,024.35		66,024.35
El Paso Natural Gas Company		7,446	7,446	.0323		240.38	240.38
Other							
Total Keystone	1,173,321	7,446	1,180,767	.0561	66,024.35	240.38	66,264.73
Lee	3,489,545		3,489,545	.0491	171,440.15		171,440.15
El Paso Natural Gas Company		20,836	20,836	.0425		884.85	884.85
Other							
Total Lee	3,489,545	20,836	3,510,381	.0491	171,440.15	884.85	172,325.00

1055

7804

COPY BOUND VERTICALLY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
SALES OF RESIDUE GAS
YEAR 1950

[7805]

Sheet 3

7805

Gasoline Plant	Volume in Mcf @ 14.65 p.s.i.a.			Price Per Mcf	Amount		
	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales		Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Mankins	34		34	$ .0268	$ .91	$	$ .91
Lone Star Gas Company	135,525		135,525	.0477	6,469.58		6,469.58
United Gas Pipe Line Company		37,542	37,542	.0250		938.40	938.40
Other							
Total Mankins	135,559	37,542	173,101	.0428	6,470.49	938.40	7,408.89
Seminole	6,507,328		6,507,328	.0472	307,198.55		307,198.55
El Paso Natural Gas Company					2,312.82		2,312.82
Southern California Gas Co.					920.85		920.85
Southern Counties Gas Co. of California		3,311	3,311	.0468		154.90	154.90
Other							
Total Seminole	6,507,328	3,311	6,510,639	.0477	310,432.22	154.90	310,587.12
Sherman	77,153,738		77,153,738	.0817	6,304,885.48		6,304,885.48
Michigan Wisconsin Pipe Line Co.		112,247	112,247	.0616		6,915.26	6,915.26
Other							
Total Sherman	77,153,738	112,247	77,265,985	.0817	6,304,885.48	6,915.26	6,311,800.74
Wewoka		427,058	427,058	.0490		20,943.87	20,943.87
Billings (25%)			....	....		1,023.95	1,023.95
Denoya		5,800	5,800	.0503		291.54	291.54
Eliasville		89	89	.0492		4.38	4.38
Elk Basin (.0068060%)		1,585	1,585	.0571		90.54	90.54
Ibex Gas Treater		314	314	.1811		56.86	56.86
Lodi		2,336	2,336	.0256		59.72	59.72
Lodi Booster Station							
Arkansas Louisiana Gas Co.	291,024		291,024	$ .0381	$ 11,079.23	$	$ 11,079.23

1056

BLEED THROUGH

BLURRED COPY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
SALES OF RESIDUE GAS
YEAR 1950

[7806]
Sheet 4

Gasoline Plant	Volume in Mcf @ 14.65 p.s.i.a.				Amount		
	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Lucien (8/108 Int.)		....	....	$	$	$ 240.79	$ 240.79
Reserve		360	360	.0500		18.00	18.00
Borger Residue System							
El Paso Natural Gas Co.	47,831,832		47,831,832	.0505	2,413,176.13		2,413,176.13
Panhandle Eastern Pipe Line Co.	20,779,615		20,779,615	.0403	838,191.45		838,191.45
Southwestern Public Service Co.	7,150,320		7,150,320	.0506	361,968.43		361,968.43
Texoma Natural Gas Company	595,579		595,579	.0902	53,701.21		53,701.21
Other		47,560,516	47,560,516	.0471		2,237,755.49	
Total Borger Residue System	76,357,346	47,560,516	123,917,862	.0477	3,667,037.22	2,237,755.49	5,904,792.71
Capitol Residue System		446,205	446,205	.0487		21,737.26	21,737.26
Pampa Residue System							
Independent Natural Gas Company	10,965,671		10,965,671	.0245	268,637.24		268,637.24
Southwestern Public Service Company	713,833		713,833	.0521	37,219.33		37,219.33
Other		12,634,671	12,634,671	.0620		783,275.60	783,275.60
Total Pampa Residue System	11,679,504	12,634,671	24,314,175	.0448	305,856.57	783,275.60	1,089,132.17
TOTAL SALES OF RESIDUE GAS	292,610,915	84,528,586	377,139,501	$ .0538	$16,033,809.55	$ 4,240,645.81	$20,274,455.36

1057

780

COPY BOUND VERTICALLY

BLEED THROUGH

BLURRED COPY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
SALES FROM CASINGHEAD ROYALTIES
YEAR 1950

Area or District	Volume in Mcf @ 14.65 p.s.i.a.				Amount		
	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Oklahoma							
Consolidated Gas Utilities Corp.	---	---	---	$ ---	$ (.02)	$	$ (.02)
Other		106,671	106,671	.0492		5,248.62	5,248.62
Total Oklahoma	---	106,671	106,671	.0492	(.02)	5,248.62	5,248.60
Texas							
Lone Star Gas Company	7,846		7,846	.0478	374.95		374.95
Other		167,300	167,300	.0385		6,435.91	6,435.91
Total Texas	7,846	167,300	175,146	.0389	374.95	6,435.91	6,810.86
Kansas		3,588	3,588	.0285		101.66	101.66
Arkansas		50,268	50,268	.0742		373.12	373.12
Louisiana		12,841	12,841	.0941		1,207.73	1,207.73
New Mexico		381	381	.0324		12.33	12.33
Total Sales From Casinghead Royalties	7,846	341,049	348,895	$ .0394	$ 374.93	$ 13,379.37	$ 13,754.30

COPY BOUND VERTICALLY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
SALES FROM DRY GAS ROYALTIES
YEAR 1950

[7808]
Sheet 6

Area or District	Volume in Mcf @ 14.65 p.s.i.a.			Price Per Mcf	Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales		Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Oklahoma							
Consolidated Gas Utilities Corp.	16,744		16,744	$ .0447	$ 747.79	$	$ 747.79
Lone Star Gas Company	3,815		3,815	.0561	213.87		213.87
Other		25,280	25,280	.0507		1,282.63	1,282.63
Total Oklahoma	20,559	25,280	45,839	.0490	961.66	1,282.63	2,244.29
Texas							
Lone Star Gas Company	491,385		491,385	.0231	11,348.79		11,348.79
Texoma Natural Gas Company	48,539		48,539	.0512	2,486.40		2,486.40
United Gas Pipe Line Company	8,178		8,178	.0565	461.81		461.81
Other		1,028,019	1,028,019	.0494		50,807.62	50,807.62
Total Texas	548,102	1,028,019	1,576,121	.0413	14,297.00	50,807.62	65,104.62
Kansas							
Union Gas System	582		582	.0775	45.13		45.13
Louisiana		16,497	16,497	.0718		1,185.20	1,185.20
Montana		217,223	217,223	.0559		12,147.56	12,147.56
Total Sales From Dry Gas Royalties	569,243	1,287,019	1,856,262	$ .0435	$ 15,303.79	$ 65,423.01	$ 80,726.80

1059

7808

BLEED THROUGH

BLURRED COPY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
GAS SALES FROM DISTRIBUTING SYSTEM
YEAR 1950

Area or District	Volume in Mcf @ 14.65 p.s.i.a.				Amount		
	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Phillips Natural Gas Company							
Burbank		37,854	37,854	$ .3126	$	$ 11,834.10	$ 11,834.10
Oklahoma City		3,025,457	3,025,457	.0759		229,541.87	229,541.87
Blue Lake Gas System		128,769	128,769	.1700		21,890.73	21,890.73
Texas Miscellaneous							
Southern Union Gas Company	63,470		63,470	.0877	5,565.81		5,565.81
Southwestern Public Service Co.	29,302		29,302	.0657	1,926.31		1,926.31
Other		90,448	90,448	.0791		7,156.78	7,156.78
Total Texas Miscellaneous	92,772	90,448	183,220	.0800	7,492.12	7,156.78	14,648.90
Total Phillips Natural Gas Company	92,772	3,282,528	3,375,300	.0823	7,492.12	270,423.48	277,915.60
Russell		463,478	463,478	.0231		107,140.88	107,140.88
Cactus		4,783	4,783	.0655		313.21	313.21
Chocolate Bayou		51,269,396	51,269,396	.0493		2,525,177.21	2,525,177.21
Total Sales From Distributing Systems	92,272	55,020,185	55,112,957	$ .0528	$ 7,492.12	$ 2,903,054.78	$ 2,910,546.90

COPY BOUND VERTICALLY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
GAS SALES BY INDEPENDENT NATURAL GAS COMPANY
YEAR 1950

[7810]
Sheet 8

1061

Area or District	Volume in Mcf @ 14.65 p.s.i.a.			Price Per Mcf	Amount		
	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales		Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Grayco Station							
Northern Natural Gas Company	2,714,407		2,714,407	$ .0490	$ 133,078.69		$ 133,078.69

7810

BLEED THROUGH

BLURRED COPY

1062

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
GAS SALES FROM CYCLING OPERATIONS
YEAR 1950

[7811]
Sheet 9

Area or District	Volume in Mcf @ 14.65 p.s.i.a.				Amount		
	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Erath		15,117	15,117	$ .1006	$	$ 1,522.01	$ 1,522.01
Hico-Knowles							
Texas Eastern Transmission	1,450,036		1,450,036	.0562	81,553.34		81,553.34
Burnell—North Pettus							
United Gas Pipe Line Company	11,349		11,349	.0320	363.28		363.28
Total Sales From Cycling Operations	1,461,385	15,117	1,476,502	$ .0565	$ 81,916.62	$ 1,522.01	$ 83,438.63

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
GAS SALES FROM DRY GAS LEASES
1950

[7812]
Sheet 1 of 2

District or Area	Volume in Mcf @ 14.65 p.s.i.a.				Amount		
	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Chase Kansas—Phillips Operated	128,638		128,638	$ .0357	$ 4,596.27	$	$ 4,596.27
Kansas Nebraska Natural Gas Co.	21,157		21,157	.0857	1,812.54		1,812.54
Total Phillips Operated	149,795		149,795	.0428	6,408.81		6,408.81
Guymon Kansas—Partner Operated							
Colorado Interstate Gas Company	11,185		11,185	.0829	926.91		926.91
East Texas—Partner Operated							
Arkansas Louisiana Gas Company	30,125		30,125	.0553	1,664.43		1,664.43
Other		841,191	841,191	.1033		86,936.14	86,936.14
Total Partner Operated	30,125	841,191	871,316	.1017	1,664.43	86,936.14	88,600.57
East Texas—Phillips Operated							
United Gas Pipe Line Company	3,008,656		3,008,656	.0743	223,679.62		223,679.62
Other		305,413	305,413	.0814		24,873.15	24,873.15
Total Phillips Operated	3,008,656	305,413	3,314,069	.0750	223,679.62	24,873.15	248,552.77
Beaumont—Partner Operated		263,845	263,845	.0301		7,954.72	7,954.72
Corpus Christi—Partner Operated		229,856	229,856	.0351		8,067.81	8,067.81
Corpus Christi—Phillips Operated							
United Gas Pipe Line Company	28,716		28,716	.0266	763.36		763.36
Other		42,067	42,067	.0266		1,121.07	1,121.07
Total Phillips Operated	28,716	42,067	70,783	.0266	763.36	1,121.07	1,884.43
Guymon Texas—Phillips Operated		80,742	80,742	.0602		4,859.05	4,859.05
Panhandle—Partner Operated							
Northern Natural Gas Company	43,744		43,744	.0442	1,932.21		1,932.21
Other		255,931	255,931	.0279		7,134.42	7,134.42
Total Partner Operated	43,744	255,931	299,675	.0303	1,932.21	7,134.42	9,066.63
Panhandle—Phillips Operated							
Panhandle Eastern Pipe Line Co.	12,503,205		12,503,205	.0294	367,094.11		367,094.11
Other		1,463,659	1,463,659	.0320		46,880.77	46,880.77
Total Phillips Operated	12,503,205	1,463,659	13,966,864	.0296	367,094.11	46,880.77	413,974.88
Ardmore—Partner Operated		5,891	5,891	.0447		263.14	263.14

1063

7812

COPY BOUND VERTICALLY

BLEED THROUGH

BLURRED COPY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
GAS SALES FROM DRY GAS LEASES (Con't)
1950

[7813]
Sheet 2 of 2

District or Area	Volume in Mcf @ 14.65 p.s.i.a.			Price Per Mcf	Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales		Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Ardmore—Phillips Operated	1,934,935		1,934,935	$ .0524	$ 101,478.17	$	$ 101,478.17
Consolidated Gas Utilities Corp.	28,712		28,712	.0514	1,475.15		1,475.15
Lone Star Gas Company		347,365	347,365	.0536		18,617.04	18,617.04
Other							
Total Phillips Operated	1,963,647	347,365	2,311,012	.0526	102,953.32	18,617.04	121,570.36
Guymon-Partner Operated	49,168		49,168	.0232	11,414.81		11,414.81
Southwestern Public Service Co.						142.34	142.34
Other							
Total Partner Operated	49,168		49,168	.0235	11,414.81	142.34	11,557.15
Oklahoma City—Partner Operated		47,932	47,932	.0457		2,190.30	2,190.30
Seminole—Phillips Operated		368,141	368,141	.0441		16,232.06	16,232.06
Total Sales from Dry Gas Leases	17,788,241	4,252,033	22,040,274	$ .0427	$ 716,837.58	$ 225,272.01	$ 942,109.59

1064

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
GAS SALES FROM OIL LEASES
1950

[7814]
Sheet 1 of 4

District or Area	Volume in Mcf @ 14.65 p.s.i.a.			Price Per Mcf	Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales		Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Kentucky—Partner Operated		9,283	9,283	$ .0751	$	$ 697.44	$ 697.44
Mississippi—Phillips Operated		2,208	2,208	.0438		96.80	96.80
Cut Bank Montana—Phillips Operated		16,118	16,118	.0488		785.82	785.82
Rangely Colorado—Partner Operated		5,260	5,260	.0231		121.37	121.37
Hobbs New Mexico—Partner Operated							
El Paso Natural Gas Company	33,214		33,214	.0633	2,101.52		2,101.52
Other		223,321	223,321	.0293		6,533.24	6,533.24
Total Partner Operated	33,214	223,321	256,535	.0337	2,101.52	6,533.24	8,634.76
Hobbs New Mexico—Phillips Operated							
El Paso Natural Gas Company	166,854		166,854	.0599	10,002.46		10,002.46
Other		253,529	253,529	.0242		6,124.69	6,124.69
Total Phillips Operated	166,854	253,529	420,383	.0384	10,002.46	6,124.69	16,127.15
Beaumont S. Louisiana—Partner Op.		19,159	19,159	.0368		705.11	705.11
Beaumont S. Louisiana—Phillips Op.							
United Gas Pipe Line Company	195,239		195,239	.0517	10,095.81		10,095.81
Other		549,966	549,966	.0585		32,168.59	32,168.59
Total Phillips Operated	195,239	549,966	745,205	.0567	10,095.81	32,168.59	42,264.40
E. Texas N. Louisiana—Partner Operated							
Arkansas Louisiana Gas Company	63,803		63,803	.0332	2,120.54		2,120.54
E. Texas N. Louisiana—Phillips Operated							
Arkansas Louisiana Gas Company	1,591,679		1,591,679	.0345	54,842.53		54,842.53
Southern Natural Gas Company	987,585		987,585	.0617	60,931.66		60,931.66
Other		32,767	32,767	.0538		1,763.74	1,763.74
Total Phillips Operated	2,579,264	32,767	2,612,031	.0450	115,774.19	1,763.74	117,537.93
Minden N. Louisiana—Partner Operated							
Arkansas Louisiana Gas Company	68,187		68,187	.0732	4,989.11		4,989.11
United Gas Pipe Line Company	117,629		117,629	.0559	6,579.02		6,579.02
Other		6,787	6,787	2.4049		16,321.96	16,321.96
Total Partner Operated	185,816	6,787	192,603	.1448	11,568.13	16,321.96	27,890.09

1065

7814

COPY BOUND VERTICALLY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
GAS SALES FROM OIL LEASES
1950

[7815]

Sheet 2 of 4

District or Area	Volume in Mcf @ 14.65 p.s.i.a.			Price Per Mcf	Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales		Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Minden N. Louisiana—Phillips Operated							
Arkansas Louisiana Gas Company	339,204		339,204	$ .0353	$ 11,968.68	$	$ 11,968.68
Southern Natural Gas Company	150,433		150,433	.0536	8,056.66		8,056.66
Total Phillips Operated	489,637		489,637	.0409	20,025.34		20,025.34
Minden Shuler—Partner Operated							
Arkansas Louisiana Gas Company	476,901		476,901	.0326	15,550.55		15,550.55
Other		3,381,317	3,381,317	.0077		25,867.89	25,867.89
Total Partner Operated	476,901	3,381,317	3,858,218	.01074	15,550.55	25,867.89	41,418.44
Minden Shuler—Phillips Operated							
Arkansas Louisiana Gas Company	1,298,968		1,298,968	.0267	34,660.55		34,660.55
Other		194,546	194,546	.0086		1,679.09	1,679.09
Total Phillips Operated	1,298,968	194,546	1,493,514	.0243	34,660.55	1,679.09	36,339.64
Smackover—Phillips Operated		13,759	13,759	.0737		1,013.79	1,013.79
Chase W. Kansas—Partner Operated		9,419	9,419	.0369		347.15	347.15
Chase W. Kansas—Phillips Operated							
Kansas Power and Light Company	167,482		167,482	.0558	9,338.93		9,338.93
Other		234,440	234,440	.0219		5,131.45	5,131.45
Total Phillips Operated	167,482	234,440	401,922	.0360	9,338.93	5,131.45	14,470.38
Eastern Kansas—Partner Operated		44,170	44,170	.0361		1,596.19	1,596.19
Eastern Kansas—Phillips Operated		16,188	16,188	.0475		769.05	769.05
Minden Rodessa Texas—Partner Op.							
Arkansas Louisiana Gas Company	2,100		2,100	.1418	297.69		297.69
Other				....		76.54	76.54
Total Partner Operated	2,100		2,100	.1782	297.69	76.54	374.23
Minden Rodessa Texas—Phillips Op.		409,677	409,677	.0167		6,859.06	6,859.06
East Texas—Partner Operated		5,593	5,593	.1177		658.34	658.34
East Texas—Phillips Operated							
Lone Star Gas Company	3,219,592		3,219,592	.0381	122,579.51		122,579.51
Other		76,083	76,083	.1256		9,556.31	9,556.31
Total Phillips Operated	3,219,592	76,083	3,295,675	$ .0401	$ 122,579.51	$ 9,556.31	$ 132,135.82

7815

1066

BLEED THROUGH

BLURRED COPY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
GAS SALES FROM OIL LEASES
1950

[7816]
Sheet 3 of 4

District or Area	Volume in Mcf @ 14.65 p.s.i.a.			Price Per Mcf	Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales		Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Beaumont—Partner Operated		3,038,370	3,038,370	$ .0309	$	$ 93,903.09	$ 93,903.09
Beaumont—Phillips Operated		221,357	221,357	.0102		2,265.45	2,265.45
Chocolate Bayou—Partner Operated		193,859	193,859	.0469		9,100.45	9,100.45
Chocolate Bayou—Phillips Operated		343	343	.0541		18.54	18.54
League City—Partner Operated		484,580	484,580	.0483		23,412.58	23,412.58
League City—Phillips Operated		974,747	974,747	.0481		45,590.33	45,590.33
Corpus Christi—Partner Operated		455,289	455,289	.0324		14,739.89	14,739.89
Corpus Christi—Phillips Operated		1,113,394	1,113,394	.0381		42,366.44	42,366.44
North Central Texas—Phillips Operated		614,953	614,953	.0293		18,014.62	18,014.62
Big Springs—Partner Operated		285,021	285,021	.0461		13,131.76	13,131.76
Big Springs—Phillips Operated		658,404	658,404	.0364		23,981.85	23,981.85
West Texas—Partner Operated		191,542	191,542	.0327		6,269.65	6,269.65
West Texas—Phillips Operated		5,416,737	5,416,737	.0432		233,927.42	233,927.42
Hobbs Texas—Partner Operated		116,558	116,558	.0328		3,825.50	3,825.50
Hobbs Texas—Phillips Operated		133,741	133,741	.0326		4,363.34	4,363.34
Panhandle—Partner Operated		138,532	138,532	.0359		4,978.95	4,978.95
Panhandle—Phillips Operated		2,510,599	2,510,599	.0352		88,473.23	88,473.23
Antioch—Phillips Operated		177,098	177,098	.0239		4,233.63	4,233.63
Ardmore—Partner Operated		1,311,942	1,311,942	.0212		27,851.22	27,851.22
Ardmore—Phillips Operated							
Consolidated Gas Utilities Corp.	24,402		24,402	.0610	1,489.72		1,489.72
Lone Star Gas Company	352,907		352,907	.0535	18,875.08		18,875.08
Other		1,987,445	1,987,445	.0356		70,808.46	70,808.46
Total Phillips Operated	377,309	1,987,445	2,364,754	.0386	20,364.80	70,808.46	91,173.26

1067

7816

COPY BOUND VERTICALLY

BLEED THROUGH

BLURRED COPY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
GAS SALES FROM OIL LEASES
1950

7817

District or Area	Volume in Mcf @ 14.65 p.s.i.a.			Price Per Mcf	Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales		Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
West Edmond—Partner Operated		1,119,303	1,119,303	$ .0346	$	$ 38,718.57	$ 38,718.57
South Burbank District							
Bartlesville—Partner Operated		----	----	----		40.50	40.50
Billings—Phillips Operated		119,590	119,590	.0323		3,863.89	3,863.89
Kay County—Phillips Operated		78,280	78,280	.0294		2,299.89	2,299.89
Lucien—Partner Operated		11,391	11,391	.0495		563.86	563.86
Pawnee—Phillips Operated		36,298	36,298	.0446		1,618.21	1,618.21
Ramsey Pool—Partner Operated		137,940	137,940	.0185		2,549.08	2,549.08
South Burbank—Phillips Operated		544,421	544,421	.0257		13,980.14	13,980.14
Oklahoma City District							
Guthrie—Partner Operated		23,527	23,527	.0454		1,067.14	1,067.14
Guthrie—Phillips Operated		239,548	239,548	.0327		7,834.39	7,834.39
Oklahoma City—Partner Operated		70,785	70,785	.0585		4,141.11	4,141.11
Seminole—Partner Operated		35,512	35,512	.0281		999.41	999.41
Seminole—Phillips Operated		644,361	644,361	.0486		31,299.18	31,299.18
North Burbank—Phillips Operated		1,165,302	1,165,302	.0177		20,636.18	20,636.18
Total Gas Sales from Oil Leases	9,256,179	29,754,419	39,010,598	$ .0347	$ 374,480.02	$ 979,741.57	$ 1,354,221.59

1068

[7821]

Exhibit No. 55

[*Note: Cover, title page, and table of contents are omitted.*]

COPY BOUND VERTICALLY

BLEED THROUGH

BLURRED COPY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
IN 1949

[7821]
Sheet 1 of 12

Summary	Volume in Mcf @ 14.735 p.s.i.a.			Price Per Mcf	Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales		Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Gas Sales From Oil Leases	6,662,238	27,243,366	33,905,604	$ .0361	$ 252,898.14	$ 970,597.28	$ 1,223,495.42
Gas Sales From Phillips' Royalties	69,782	1,837,854	1,907,636	.0430	3,234.00	78,752.55	81,986.55
Wasatch Oil Company Sales	....	15,407	15,407	.0973	....	1,499.59	1,499.59
Wasatch Oil Refining Company Sales	....	15,407	15,407	.0973	....	1,499.61	1,499.61
Total Sales of Casing Gas and Dry Gas From Oil Leases	6,732,020	29,112,034	35,844,054	.0365	$ 256,132.14	$ 1,052,349.03	$ 1,308,481.17
Gas Sales From Dry Gas Leases	17,680,243	4,512,990	22,193,233	.0404	704,102.65	192,300.66	896,403.31
Gas Sales From Cycling Operations	340,309	11,228	351,537	.0601	19,996.92	1,122.81	21,119.73
Gas Sales From Distributing Systems	43,246	35,180,322	35,223,568	.0565	3,518.50	1,985,346.85	1,988,865.35
Gas Sales by Independent Natural Gas Co.	12,759,180	1,003,622	13,762,802	.0541	655,744.90	89,211.39	744,956.29
Sales of Residue Gas	183,326,581	125,572,022	308,898,603	.0499	8,781,505.43	6,647,710.72	15,429,216.15
Total Outside Sales	220,881,579	195,392,218	416,273,797	.0490	$10,421,000.54	$ 9,968,041.46	$20,389,042.00

1070

COPY BOUND VERTICALLY

1071

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
IN 1949

Area or District	Volume in Mcf @ 14.735 p.s.i.a.				Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Gas Sales From Oil Leases							
Kentucky—Partner Operated	....	9,280	9,280	$ .0753	$	$ 698.48	$ 698.48
Mississippi—Phillips Operated	....	3,658	3,658	.0496	....	181.28	181.28
Rangely, Colorado—Partner Operated	....	....	....	....	....	30.64	30.64
Hobbs—New Mexico—Partner Operated							
El Paso Natural Gas Company	73,630	....	73,630	.0297	2,187.97	....	2,187.97
Other	....	116,124	116,124	.0371	....	4,304.58	4,304.58
Total Partner Operated	73,630	116,124	189,754	.0342	2,187.97	4,304.58	6,492.55
Hobbs—New Mexico—Phillips Operated							
El Paso Natural Gas Company	190,341	....	190,341	.0430	8,189.29	....	8,189.29
Other	....	347,462	347,462	.0240	....	8,323.66	8,323.66
Total Phillips Operated	190,341	347,462	537,803	.0307	8,189.29	8,323.66	16,512.95
Beaumont, La.—Partner Operated	....	353	353	.0295	....	10.43	10.43
Beaumont, La.—Phillips Operated							
Interstate Natural Gas Company	135,025	....	135,025	.0426	5,756.35	....	5,756.35
Other	....	52,738	52,738	.0445	....	2,348.41	2,348.41
Total Phillips Operated	135,025	52,738	187,763	.0432	5,756.35	2,348.41	8,104.76
Minden, North La.—Partner Operated							
Arkansas Louisiana Gas Co.	83,178	....	83,178	.0414	3,443.32	....	3,443.32
Other	....	1,465,368	1,465,368	.0966	....	141,524.21	141,524.21
Total Partner Operated	83,178	1,465,368	1,548,546	.0936	3,443.32	141,524.21	144,967.53

7822

BLEED THROUGH

BLURRED COPY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
IN 1949

[7823]
Sheet 3 of 12

7823

1072

Area or District	Volume in Mcf @ 14.735 p.s.i.a. Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Amount Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Gas Sales From Oil Leases (continued)							
Minden North La.–Phillips Operated							
Arkansas Louisiana Gas Co.	1,812,188	....	1,812,188	$ .0355	$ 64,257.34	$	$ 64,257.34
Southern Natural Gas Co.	586,212	....	586,212	.0514	30,112.93	....	30,112.93
Other	....	2,885	2,885	.0353	....	101.83	101.83
Total Phillips Operated	2,398,400	2,885	2,401,285	.0393	94,370.27	101.83	94,472.10
Minden Shuler–Partner Operated							
Arkansas Louisiana Gas Company	372,196	....	372,196	.0358	13,316.76	....	13,316.76
Other	....	3,291,464	3,291,464	.0115	....	37,865.76	37,865.76
Total Partner Operated	372,196	3,291,464	3,663,660	.0140	13,316.76	37,865.76	51,182.52
Minden Shuler–Phillips Operated							
Arkansas Louisiana Gas Company	628,675	....	628,675	.0279	17,527.70	....	17,527.70
Other	....	406,131	406,131	.0104	....	4,236.82	4,236.82
Total Phillips Operated	628,675	406,131	1,034,806	.0210	17,527.70	4,236.82	21,764.52
Smackover–Phillips Operated	....	11,976	11,976	.0870	....	1,041.59	1,041.59
Chase Kansas–Partner Operated	....	1,736	1,736	.0439	....	76.25	76.25
Chase Kansas–Phillips Operated							
Kansas Power & Light Company	179,977	....	179,977	.0540	9,710.44	....	9,710.44
Other	....	585,306	585,306	.0217	....	12,719.03	12,719.03
Total Phillips Operated	179,977	585,306	765,283	.0293	9,710.44	12,719.03	22,429.47
Eastern Kansas–Partner Operated	....	52,811	52,811	.0502	....	2,652.32	2,652.32
Minden Rodessa Texas–Partner Operated	....	44,723	44,723	.0105	....	470.51	470.51
Minden Rodessa Texas–Phillips Operated	....	175,958	175,958	.0095	....	1,669.20	1,669.20
East Texas–Partner Operated	....	5,462	5,462	.1739	....	949.59	949.59
East Texas–Phillips Operated							
Lone Star Gas Company	2,264,789	....	2,264,789	.0355	80,303.46	....	80,303.46
Other	....	89,180	89,180	.1409	....	12,563.20	12,563.20
Total Phillips Operated	2,264,789	89,180	2,353,969	.0393	$ 80,303.46	$ 12,563.20	$ 92,866.66

COPY BOUND VERTICALLY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
IN 1949

Area or District	Volume in Mcf @ 14.735 p.s.i.a.				Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Gas Sales From Oil Leases (continued)							
Beaumont—Partner Operated	....	2,714,086	2,714,086	$ .0311	....	$ 84,457.26	$ 84,457.26
Beaumont—Phillips Operated	....	182,708	182,708	.0149	....	2,725.05	2,725.05
Chocolate Bayou—Phillips Operated	....	97,456	97,456	.0514	....	5,008.40	5,008.40
League City—Partner Operated	....	371,047	371,047	.0266	....	9,853.52	9,853.52
League City—Phillips Operated	....	336,984	336,984	.0320	....	10,783.29	10,783.29
Corpus Christi—Partner Operated	....	563,995	563,995	.0317	....	17,864.26	17,864.26
Corpus Christi—Phillips Operated	....	1,391,917	1,391,917	.0361	....	50,192.44	50,192.44
North Central Texas—Partner Operated	....	6,119	6,119	.0522	....	319.25	319.25
North Central Texas—Phillips Operated	....	725,430	725,430	.0439	....	31,859.31	31,859.31
Big Springs—Partner Operated	....	39,682	39,682	.0372	....	1,477.71	1,477.71
Big Springs—Phillips Operated	....	537,689	537,689	.0337	....	18,112.08	18,112.08
West Texas—Partner Operated	....	295,577	295,577	.0280	....	8,267.24	8,267.24
West Texas—Phillips Operated	....	5,292,832	5,292,832	.0417	....	220,633.67	220,633.67
Hobbs Texas—Partner Operated	....	92,601	92,601	.0303	....	2,805.19	2,805.19
Hobbs Texas—Phillips Operated	....	135,868	135,868	.0256	....	3,479.70	3,479.70
Panhandle—Partner Operated	....	132,651	132,651	.0485	....	6,429.63	6,429.63
Panhandle—Phillips Operated	....	1,787,755	1,787,755	.0455	....	$ 81,255.07	$ 81,255.07

1073

7824

BLEED THROUGH

BLURRED COPY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
IN 1949

Area or District	Volume in Mcf @ 14.735 p.s.i.a.				Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Gas Sales From Oil Leases (continued)							
Ardmore—Partner Operated	....	817,479	817,479	$ .0174	....	$ 14,184.03	$ 14,184.03
Ardmore—Phillips Operated							
Lone Star Gas Company	297,574	....	297,574	.0538	$ 16,019.66	....	16,019.66
Consolidated Gas Utilities Co.	38,453	....	38,453	.0539	2,072.92	....	2,072.92
Other	....	978,003	978,003	.0286	....	27,975.05	27,975.05
Total Phillips Operated	336,027	978,003	1,314,030	.0351	18,092.58	27,975.05	46,067.63
West Edmond—Partner Operated	....	852,360	852,360	.0352	....	29,994.49	29,994.49
Guthrie—Partner Operated	....	348,499	348,499	.0360	....	12,552.00	12,552.00
Guthrie—Phillips Operated	....	326,029	326,029	.0302	....	9,835.04	9,835.04
Oklahoma City—Partner Operated	....	26,846	26,846	.0740	....	1,987.81	1,987.81
Oklahoma City—Phillips Operated	....	4,382	4,382	.0449	....	196.86	196.86
Seminole—Partner Operated	....	39,332	39,332	.0391	....	1,536.23	1,536.23
Seminole—Phillips Operated	....	939,795	939,795	.0476	....	44,699.11	44,699.11
South Burbank—Phillips Operated	....	526,124	526,124	.0233	....	12,269.41	12,269.41
North Burbank—Phillips Operated	....	941,466	941,466	.0262	....	24,625.57	24,625.57
Pawnee—Phillips Operated	....	76,039	76,039	.0448	....	3,407.57	3,407.57
Bartlesville—Partner Operated	....	....	....	....	....	43.25	43.25
Total Gas Sales From Oil Leases	6,662,238	27,243,366	33,905,604	$ .0361	$ 252,898.14	$ 970,597.28	$ 1,223,495.42

1074

COPY BOUND VERTICALLY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
IN 1949

Area or District	Volume in Mcf @ 14.735 p.s.i.a.				Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Gas Sales from Phillips' Royalties							
Texas							
Lone Star Gas Company	8,477	....	8,477	$ .0535	$ 453.46	....	$ 453.46
Texoma Natural Gas Company	48,438	....	48,438	.0427	2,067.16	....	2,067.16
United Gas Pipe Line Company	9,702	....	9,702	.0542	526.13	....	526.13
Other	....	1,643,121	1,643,121	.0431	....	70,846.33	70,846.33
Total	66,617	1,643,121	1,709,738	.0432	3,046.75	70,846.33	73,893.08
Oklahoma							
Lone Star Gas Company	2,676	....	2,676	.0568	152.12	....	152.12
Other	....	104,530	104,530	.0505	....	5,279.80	5,279.80
Total	2,676	104,530	107,206	.0507	152.12	5,279.80	5,431.92
Kansas							
Union Gas System	489	....	489	.0718	35.13	....	35.13
Arkansas	....	63,338	63,338	.0122	....	770.50	770.50
Louisiana	....	26,008	26,008	.0702	....	1,826.52	1,826.52
New Mexico	....	857	857	.0343	....	29.40	29.40
Total Gas Sales from Royalties	69,782	1,837,854	1,907,636	$ .0430	$ 3,234.00	$ 78,752.55	$ 81,986.55

1075

7826

BLEED THROUGH

BLURRED COPY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
IN 1949

[7827]
Sheet 7 of 12

7827

1076

Area or District	Volume in Mcf @ 14.735 p.s.i.a.				Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Gas Sales From Dry Gas Leases							
Minden North La.—Partner Operated							
Arkansas Louisiana Gas Company	39,501	....	39,501	$ .0409	$ 1,613.74	$	$ 1,613.74
Western Kansas—Phillips Operated							
Kansas Nebraska Natural Gas Co.	173,461	....	173,461	.0359	6,233.88	....	6,233.88
East Texas—Partner Operated							
Arkansas Louisiana Gas Company	41,904	....	41,904	.1044	4,376.14	....	4,376.14
Other	....	385,997	385,997	.0894	....	34,521.97	34,521.97
Total Partner Operated	41,904	385,997	427,901	.0909	4,376.14	34,521.97	38,898.11
East Texas—Phillips Operated							
United Gas Pipe Line Company	1,983,389	....	1,983,389	.0870	172,499.24	....	172,499.24
Other	....	47,909	47,909	.0775	....	3,711.44	3,711.44
Total Phillips Operated	1,983,389	47,909	2,031,298	.0867	172,499.24	3,711.44	176,210.68
Beaumont—Partner Operated	....	239,864	239,864	.0309	....	7,407.15	7,407.15
L/T Marine—Phillips Operated	....	88,915	88,915	.0245	....	2,177.23	2,177.23
Corpus Christi—Partner Operated	....	235,912	235,912	.0360	....	8,492.03	8,492.03
Corpus Christi—Phillips Operated							
United Gas Pipe Line Company	39,980	....	39,980	.0270	1,077.64	....	1,077.64
Other	....	112,317	112,317	.0430	....	4,584.30	4,584.30
Total Phillips Operated	39,980	112,317	152,297	.0372	1,077.64	4,584.30	5,661.94
Big Springs—Partner Operated	....	....	....	....	....	862.97	862.97

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
IN 1949

[7828]

Sheet 8 of 12

Area or District	Volume in Mcf @ 14.735 p.s.i.a.				Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Gas Sales From Dry Gas Leases (continued)							
Panhandle—Partner Operated							
Northern Natural Gas Company	49,157	....	49,159	$ .0454	$ 2,229.46	....	$ 2,229.46
Other	....	318,244	318,244	.0326		$ 10,372.02	10,372.02
Total Partner Operated	49,157	318,244	367,401	.0343	2,229.46	10,372.02	12,601.48
Panhandle—Phillips Operated							
Panhandle Eastern Pipe Line Co.	12,671,885	....	12,671,885	.0295	374,355.77	....	374,355.77
Other	....	1,811,337	1,811,337	.0312	....	56,479.71	56,479.71
Total Phillips Operated	12,671,885	1,811,337	14,483,222	.0297	374,355.77	56,479.71	430,835.48
Ardmore—Partner Operated	....	24,733	24,733	.0449	....	1,111.08	1,111.08
Ardmore—Phillips Operated							
Lone Star Gas Company	51,700	....	51,700	.0525	2,716.80	....	2,716.80
Consolidated Gas Utilities Corp.	2,553,961	....	2,553,961	.0532	135,878.78	....	135,878.78
Other	....	784,304	784,304	.0530	....	41,590.23	41,590.53
Total Phillips Operated	2,605,661	784,304	3,389,965	.0532	138,595.58	41,590.23	180,185.81
Guymon—Partner Operated							
Southwest Public Service Co.	75,305	....	75,305	.0414	3,121.20	....	3,121.20
Other	....	3,932	3,932	.0400	....	157.48	157.48
Total Partner Operated	75,305	3,932	79,237	.0414	3,121.20	157.48	3,278.63
Guymon—Phillips Operated	....	1,958	1,958	.0657	....	128.64	128.64
Guthrie—Phillips Operated	....	917	917	.0537	....	49.21	49.21
Oklahoma City—Partner Operated	....	41,832	41,832	.0450	....	1,881.92	1,881.92
Seminole—Phillips Operated	....	411,977	411,977	.0452	....	18,601.99	18,601.99
South Burbank—Partner Operated	....	2,842	2,842	.0603	....	171.29	171.29
Total Gas Sales From Dry Gas Leases	17,680,243	4,512,990	22,193,233	$ .0404	$ 704,102.65	$ 192,300.66	$ 896,403.31

1077

7828

COPY BOUND VERTICALLY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
IN 1949

[7829]

Sheet 9 of 12

7829

1078

Area or District	Volume in Mcf @ 14.735 p.s.i.a.				Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Gas Sales From Cycling Operations							
Texas Eastern Transmission Co.	340,309	....	340,309	$ .0588	$ 19,996.92	$	$ 19,996.92
Other	....	11,228	11,228	.1000	....	1,122.81	1,122.81
Total Gas Sales From Cycling Operations	340,309	11,228	351,537	.0601	19,996.92	1,122.81	21,119.73
Gas Sales From Distributing Systems							
Phillips Natural Gas Company							
Southern Union Gas Co.	29,838	....	29,838	.0882	2,631.95	....	2,631.95
Southwestern Public Service Co.	13,408	....	13,408	.0661	886.55	....	886.55
Other	....	1,110,313	1,110,313	.0855	....	95,133.23	95,133.23
Total	43,246	1,110,313	1,153,559	.0853	3,518.50	95,133.23	98,651.73
Russell	....	417,465	417,465	.1811	....	75,602.18	75,602.18
Cactus	....	3,059	3,059	.0625	....	191.26	191.26
Chocolate Bayou	....	33,649,485	33,649,485	.0539	....	1,814,420.18	1,814,420.18
Total Gas Sales From Distributing Systems	43,246	35,180,322	35,223,568	.0565	3,518.50	1,985,346.85	1,988,865.35
Gas Sales by Independent Natural Gas Company							
Burbank	....	23,069	23,069	.3151	....	7,269.72	7,269.72
Oklahoma City	....	915,310	915,310	.0841	....	76,939.97	76,939.97
Lodi							
Arkansas Louisiana Gas Company	247,037	....	247,037	.0309	7,628.64	....	7,628.64
Texas Miscellaneous							
Southern Union Gas Company	39,270	....	39,270	.0882	3,463.67	....	3,463.67
Southwestern Public Service Co.	19,150	....	19,150	.0661	1,266.16	....	1,266.16
Other	....	65,243	65,243	.0766	....	5,001.70	5,001.70
Total Texas Miscellaneous	58,420	65,243	123,663	.0787	4,729.83	5,001.70	9,731.53
Grayco Station							
Northern Natural Gas Company	12,453,723	....	12,453,723	.0517	643,386.43	....	643,386.43
Total Gas Sales by Independent N. G. Co.	12,759,180	1,003,622	13,762,802	$ .0541	$ 655,744.90	$ 89,211.39	$ 744,956.29

BLEED THROUGH

BLURRED COPY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
IN 1949

[7830]
Sheet 10 of 12

Gasoline Plant	Volume in Mcf @ 14.735 p.s.i.a.				Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Sales of Residue Gas							
Canadian	....	3,349,658	3,349,658	$ .0546	$	$ 183,044.77	$ 183,004.77
Edmond (50% Interest)							
Cities Service Gas Company	16,691,317	....	16,691,317	.0554	924,271.63	....	924,271.63
Other	....	21,708	21,708	.0516	....	1,120.88	1,120.88
Total Edmond	16,691,317	21,708	16,713,025	.0554	924,271.63	1,120.88	925,392.51
Eliasville							
Lone Star Gas Company	550,707	....	550,707	.0544	29,945.79	....	29,945.79
Other	....	2,520	2,520	.0643	....	162.00	162.00
Total Eliasville	550,707	2,520	553,227	.0544	29,945.79	162.00	30,107.79
Eunice							
El Paso Natural Gas Company	29,142,378	....	29,142,378	.0385	1,121,100.80	....	1,121,100.80
Southern California Gas Co.	....	....	....	....	27,444.59	....	27,444.59
Southern Counties Gas Co.	....	....	....	....	9,148.19	....	9,148.19
Other	....	10,637,286	10,637,286	.0401	....	426,690.32	426,690.32
Total Eunice	29,142,378	10,637,286	39,779,664	.0398	1,157,693.58	426,690.32	1,584,383.90
Fullerton (50% Interest)							
El Paso Natural Gas Company	7,229,322	....	7,229,322	.0417	301,237.13	....	301,237.13
Southern California Gas Company	....	....	....	....	11,875.89	....	11,875.89
Southern Counties Gas Company	....	....	....	....	3,958.65	....	3,958.65
Other	....	192,179	192,179	.0401	....	7,715.19	7,715.19
Total Fullerton	7,229,322	192,179	7,421,501	.0438	317,071.67	7,715.19	324,786.86
Goldsmith							
El Paso Natural Gas Company	21,168,808	....	21,168,808	.0496	1,049,399.55	....	1,049,399.55
Southern California Gas Company	....	....	....	....	131.73	....	131.73
Southern Counties Gas Company	....	....	....	....	43.91	....	43.91
Other	....	56,277	56,277	.0709	....	3,990.25	3,990.25
Total Goldsmith	21,168,808	56,277	21,225,085	$ .0496	$ 1,049,575.19	$ 3,990.25	$ 1,053,565.44

1079

7830

COPY BOUND VERTICALLY

BLEED THROUGH

BLURRED COPY

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
IN 1949

Gasoline Plant	Volume in Mcf @ 14.735 p.s.i.a.				Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Sales of Residue Gas (continued)							
Hansford							
Panhandle Eastern Pipe Line Co.	34,803,473	....	34,803,473	$ .0365	$ 1,270,734.26	$	$ 1,270,734.26
Hunton (37.60116160% Interest)	....	4,538,018	4,538,018	.0513	....	232,753.30	232,753.30
Ibex							
Lone Star Gas Company	628,236	....	628,236	.0539	33,867.69	....	33,867.69
Other	....	47,703	47,703	.1018	....	4,858.47	4,858.47
Total Ibex	628,236	47,703	675,939	.0573	33,867.69	4,858.47	38,726.16
Judkins							
Keystone (9.8% Interest)	....	2,202,459	2,202,459	.0454	....	99,953.24	99,953.24
El Paso Natural Gas Company	1,164,051	....	1,164,051	.0623	72,514.79	....	72,514.79
Lee							
El Paso Natural Gas Company	635,875	....	635,875	.0494	31,422.39	....	31,422.39
Other	....	4,607	4,607	.0481	....	221.49	221.49
Total Lee	635,875	4,607	640,482	.0494	31,422.39	221.49	31,643.88
Lodi							
Lodi Booster Station	....	2,117	2,117	.0290	....	61.34	61.34
Arkansas Louisiana Gas Company	1,252,653	....	1,252,653	.0397	49,734.75	....	49,734.75
Mankins							
Lone Star Gas Company	1,249	....	1,249	.0269	33.66	....	33.66
United Gas Pipe Line Company	281,369	....	281,369	.0359	10,112.12	....	10,112.12
Other	....	26,376	26,376	.0261	....	688.81	688.81
Total Mankins	282,618	26,376	308,994	.0351	10,145.78	688.81	10,834.59
Seminole	....	5,752,460	5,752,460	.0497	....	285,775.91	285,775.91

Docket No. G-1148

PHILLIPS PETROLEUM COMPANY
OUTSIDE SALES OF NATURAL GAS
IN 1949

[7832]
Sheet 12 of 12

Gasoline Plant	Volume in Mcf @ 14.735 p.s.i.a.				Amount		
	Sales to Companies Reporting to F. P. C. as Natural Gas Companies	Other Sales	Total Sales	Price Per Mcf	Sales to Companies Reporting To F. P. C. as Natural Gas Companies	Other Sales	Total Sales
Sales of Residue Gas (continued)							
Sherman							
Michigan Wisconsin Pipe Line Co.	9,894,001	....	9,894,001	$ .0809	$ 800,150.73	$	$ 800,150.73
Other	....	5,256	5,256	.0607	....	318.78	318.78
Total Sherman	9,894,001	5,256	9,899,257	.0809	800,150.73	318.78	800,469.51
Wewoka	....	410,496	410,496	.0449	....	18,420.29	18,420.29
Billings (25% Interest)	....	....	....	....	....	2,010.11	2,010.11
Crane	....	7,721	7,721	.0448	....	346.09	346.09
Denoya	....	6,797	6,797	.0502	....	341.09	341.09
Elk Basin (.0068060% Interest)	....	2,065	2,065	.0600	....	123.90	123.90
Hobbs	....	31,850	31,850	.0457	....	1,455.80	1,455.80
Lucien (8/108 Interest)	....	....	....	....	....	241.17	241.17
Reserve	....	510	510	.0500	....	25.51	25.51
Borger Residue System							
El Paso Natural Gas Company	28,600,206	....	28,600,206	.0522	1,491,632.38	....	1,491,632.38
Panhandle Eastern Pipe Line Co.	20,452,847	....	20,452,847	.0397	811,890.81	....	811,890.81
Southwestern Public Service Co.	6,375,744	....	6,375,744	.0526	334,520.74	....	334,520.74
Texoma Natural Gas Company	3,738,021	....	3,738,021	.0958	358,088.50	....	358,088.50
Other*	....	83,352,325	83,352,325	.0535	....	4,458,284.54	4,458,284.54
Total Borger Residue System	59,166,818	83,352,325	142,519,143	.0523	2,996,132.43	4,458,284.54	7,454,416.97
Capitol Residue System	....	543,403	543,403	.0464	....	25,215.41	25,215.41
Pampa Residue System							
Southwestern Public Service Co.	716,324	....	716,324	.0534	38,244.75	....	38,244.75
Other	....	14,378,231	14,378,231	.0622	....	893,932.06	893,932.06
Total Pampa Residue System	716,324	14,378,231	15,094,555	.0618	38,244.75	893,932.06	932,176.81
Total Sales of Residue Gas	183,326,581	125,572,022	308,898,603	$ .0499	$ 8,781,505.43	$ 6,647,710.72	$15,429,216.15

*Includes vapors sold through Borger Residue System.

1081

7832

COPY BOUND VERTICALLY

[7836]

Exhibit No. 58

PHILLIPS PETROLEUM COMPANY
PANHANDLE & HUGOTON FIELD GASOLINE PLANTS

BLEED THROUGH

BLURRED COPY

PHILLIPS PETROLEUM COMANY [7836]

PANHANDLE & HUGOTON FIELD GASOLINE PLANTS

Year 1950 Month	Dumas Plant Volume* Processed @ 14.65	Dumas Plant Volume* Flared @ 14.65	Sherman Plant Volume* Processed @ 14.65	Sherman Plant Volume* Flared @ 14.65	Hansford Plant Volume* Processed @ 14.65	Hansford Plant Volume* Flared @ 14.65	Gray Plant Volume* Processed @ 14.65	Gray Plant Volume* Flared @ 14.65	Sneed Plant Volume* Processed @ 14.65	Sneed Plant Volume* Flared @ 14.65
January	5,079,866 MCF	—0—	5,316,543 MCF	—0—	2,956,785 MCF	—0—	1,942,215 MCF	—0—	6,663,262 MCF	—0—
February	4,913,113 MCF	—0—	5,476,142 MCF	—0—	2,456,783 MCF	—0—	1,819,098 MCF	—0—	6,101,916 MCF	—0—
March	5,427,116 MCF	—0—	6,141,866 MCF	—0—	2,773,605 MCF	—0—	1,699,470 MCF	—0—	6,876,664 MCF	—0—
April	5,187,520 MCF	—0—	5,953,551 MCF	—0—	2,553,321 MCF	—0—	1,438,086 MCF	3,630	6,776,812 MCF	—0—
May	5,008,620 MCF	—0—	6,203,224 MCF	—0—	2,685,967 MCF	—0—	1,372,128 MCF	3,875	6,762,780 MCF	—0—
June	3,928,961 MCF	—0—	5,831,390 MCF	—0—	2,626,903 MCF	—0—	1,343,498 MCF	1,320	6,455,066 MCF	—0—
July	3,622,464 MCF	—0—	6,648,583 MCF	—0—	2,739,485 MCF	—0—	1,339,491 MCF	2,480	6,561,621 MCF	—0—
August	3,555,275 MCF	—0—	6,792,328 MCF	—0—	2,697,822 MCF	—0—	1,351,268 MCF	1,581	6,795,938 MCF	—0—
September	3,110,256 MCF	—0—	6,817,845 MCF	—0—	2,602,317 MCF	—0—	1,313,912 MCF	—0—	6,619,268 MCF	—0—
October	2,551,933 MCF	—0—	7,528,671 MCF	—0—	2,731,298 MCF	—0—	1,386,629 MCF	—0—	6,903,942 MCF	—0—
November	2,949,164 MCF	—0—	8,137,926 MCF	—0—	2,666,343 MCF	—0—	1,617,663 MCF	4,320	6,815,421 MCF	—0—
December	4,986,358 MCF	—0—	8,757,584 MCF	—0—	2,816,813 MCF	—0—	1,994,114 MCF	—0—	7,051,056 MCF	—0—
Total for Year 1950	50,320,646 MCF	—0—	79,605,653 MCF	—0—	32,307,442 MCF	—0—	18,617,572 MCF	17,206	80,383,746 MCF	—0—
March	5,384,052 MCF	—0—	11,215,158 MCF	—0—	5,485,688 MCF	—0—	1,591,561 MCF	—0—	7,083,243 MCF	—0—

*Source: Texas Railroad Commission Form GP-1

BLEED THROUGH BLURRED COPY COPY BOUND VERTICALLY

[7837]

Exhibit No. 59

PHILLIPS PETROLEUM COMPANY
WESTERN DISTRICT GASOLINE PLANTS

BLEED THROUGH BLURRED COPY

PHILLIPS PETROLEUM COMPANY
WESTERN DISTRICT GASOLINE PLANTS

[7837]

Year 1950 Month	Crane Plant Volume* Processed @ 14.65 psia	Crane Plant Volume* Flared @ 14.65 psia	Goldsmith Plant Volume* Processed @ 14.65 psia	Goldsmith Plant Volume* Flared @ 14.65 psia	Fullerton Plant Volume* Processed @ 14.65 psia	Fullerton Plant Volume* Flared @ 14.65 psia	Eunice Plant Volume** Processed @ 15.025 psia	Eunice Plant Volume** Flared @ 15.025 psia
January	919,806MCF	526,813MCF	1,936,544MCF	22,216MCF	1,404,786MCF	0MCF	3,517,273MCF	0MCF
February	816,952	480,583	1,807,092	20,411	920,339	0	3,251,352	0
March	896,346	539,591	2,066,132	3,868	1,322,584	1,447	3,642,686	0
April	940,403	601,442	2,298,928	60,273	1,411,153	400	3,544,412	38,522
May	936,135	554,024	2,608,605	29,806	1,458,381	38,191	3,719,198	49,533
June	959,275	633,353	2,811,956	2,889	1,586,571	20,379	3,579,880	231,774
July	1,043,744	398,756	3,098,112	13,757	1,747,322	58,724	3,739,507	69,621
August	1,055,610	32,244	3,356,134	47,641	1,852,020	239,887	3,883,977	67,373
September	1,060,703	38,458	3,612,113	101,272	1,899,109	132,142	3,700,564	360,508
October	1,084,746	61,668	3,715,856	60,961	2,028,064	205,757	3,758,831	54,211
November	1,032,792	69,191	3,164,172	15,326	1,872,468	138,534	3,576,947	82,874
December	957,908	45,631	3,066,480	13,652	1,530,358	54,150	3,641,858	123,388
Total for Year 1950	11,704,420	3,981,754	33,542,124	392,072	19,034,255	889,611	43,556,485	1,077,804
March, 1951	1,187,713	41,758	3,889,639	210,393	1,554,093	31,302	3,769,147	197,270

*Source: Texas Railroad Commission, Form GP-1
**Source: New Mexico Conservation Commission, Form C-114

BLEED THROUGH
BLURRED COPY
COPY BOUND VERTICALLY